FREIGHT TRAFFIC ISSUE: WHAT WILL MAKE TOFC GROW? p. 37

MAY 29, 1967

RAILWAY AGE

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THE TRANSPORTATION WEEKLY

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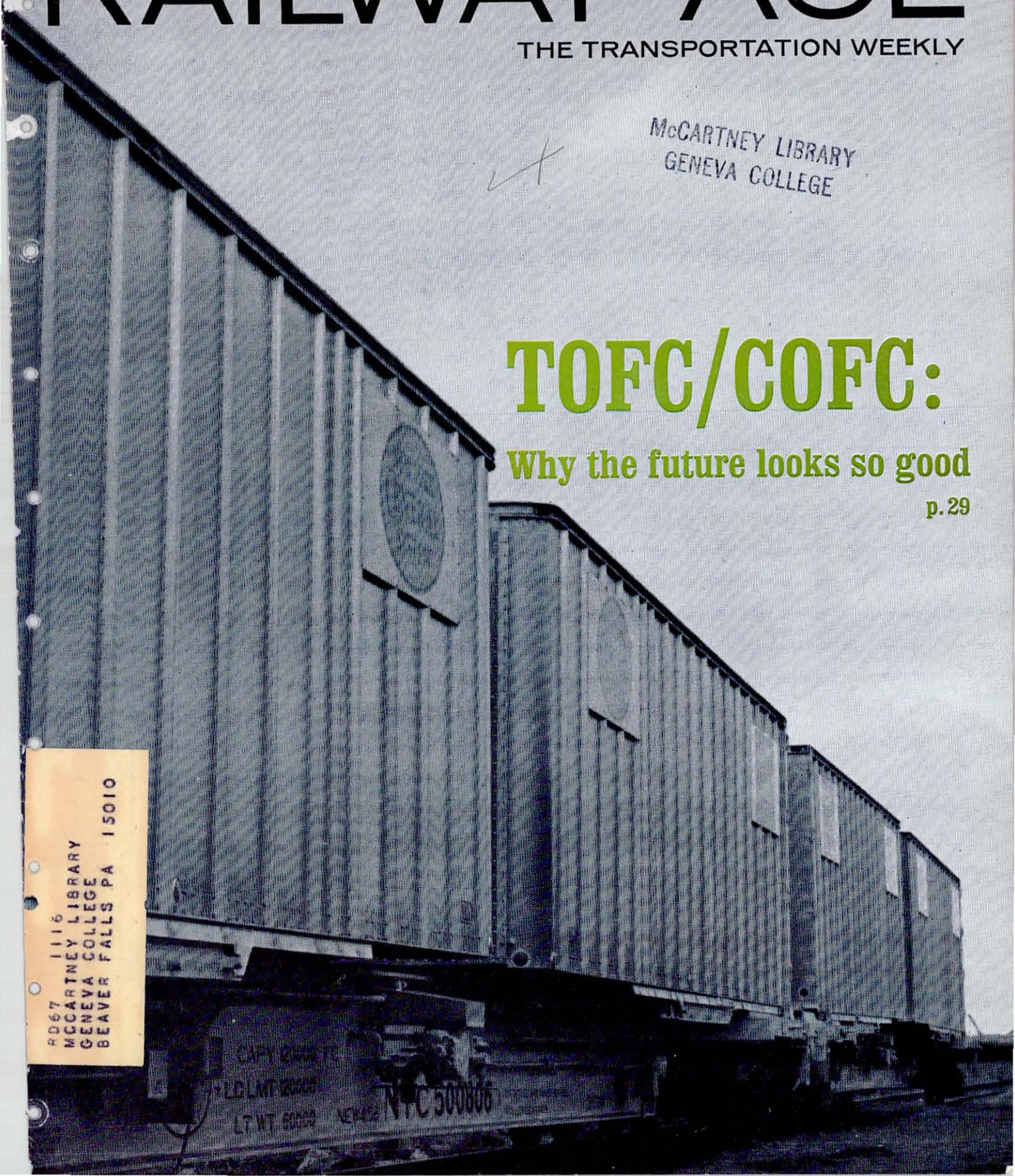
TOFC/COFC:

Why the future looks so good

p. 29



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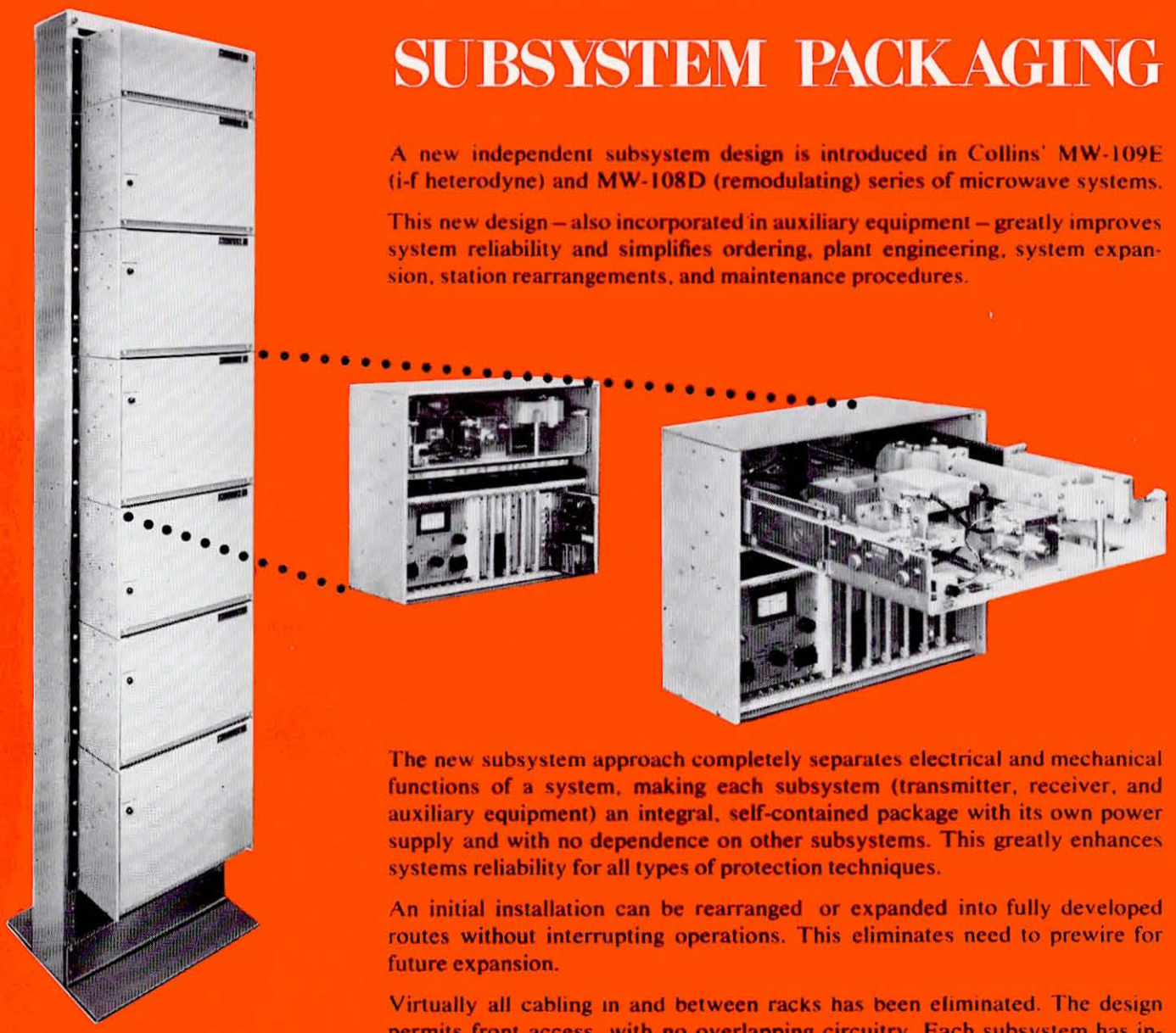
Collins' new basic microwave design

INDEPENDENT SUBSYSTEM PACKAGING



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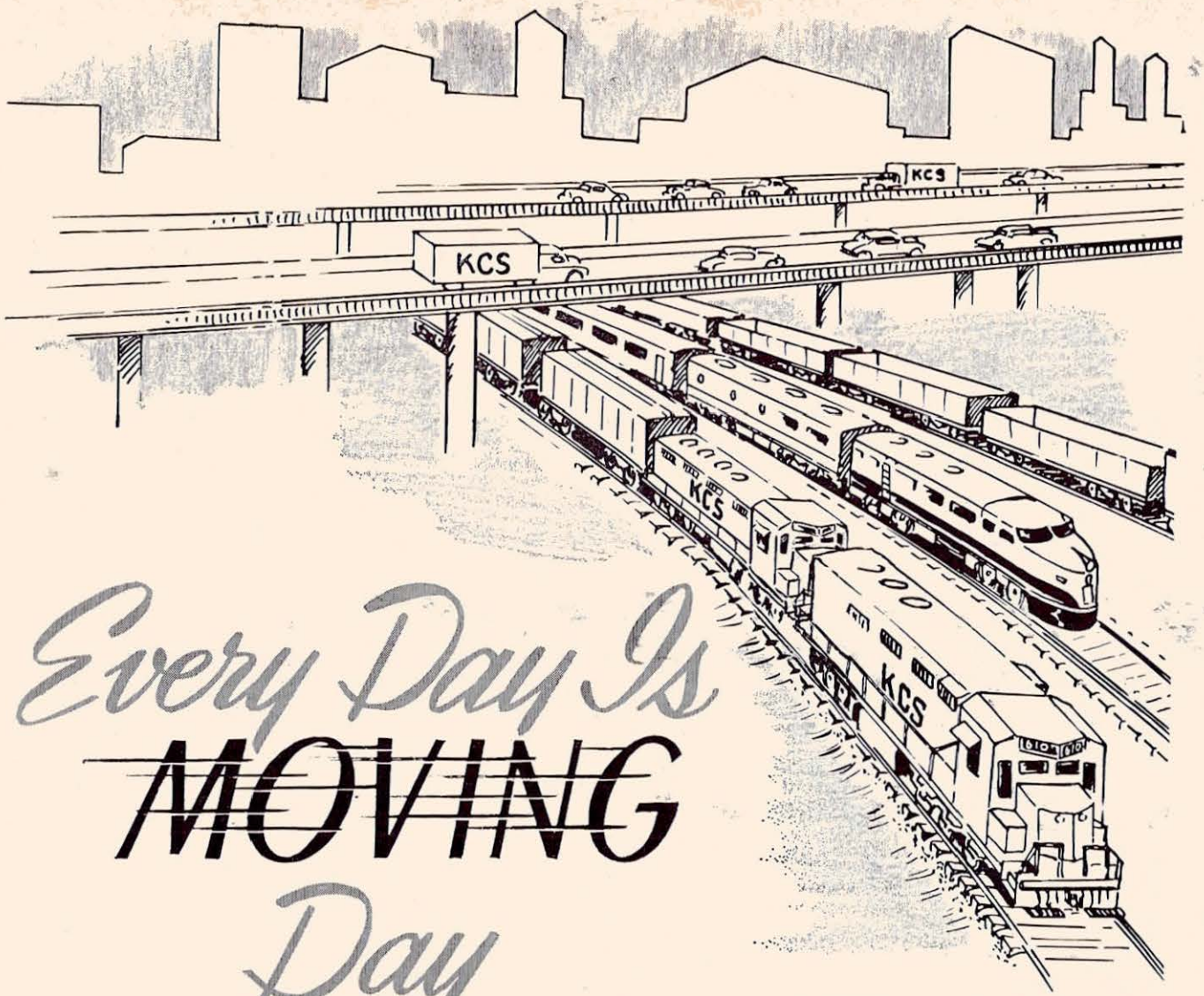

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TOFC/COFC:

29 Why the future looks so good

Expectations are that TOFC/COFC carloadings will exceed 2.6 million by 1972, producing revenues of well over $1 billion.

37 What's going for TOFC, or against it?

Traffic Poll respondents say the future of TOFC looks bright—if rates, facilities and service are right.

98 Viewpoint: Beware costs—beware complacency

Increased sales effort, service improvement and rate refinement are basic to the continued health, and growth, of piggyback.

58 CB&Q tries a rail-air experiment

The operation involved four containers that went from Denver to Chicago to London in 57 hours on a Burlington-Pan Am routing.

DEPARTMENTS

41 As the Editor Sees It
93 Freight Carloadings
73 Industrial Traffic
92 Letters from Readers
12 Lines on Labor
8 Monday Morning Report
93 New Equipment
51 New Products Report
74 People in the News
93 Railway Market
47 Revenues and Expenses
7 Short and Significant
76 Supply Trade
37 Traffic Poll
98 Viewpoint
91 Watching Washington
11 Week at a Glance
94 You Ought to Know

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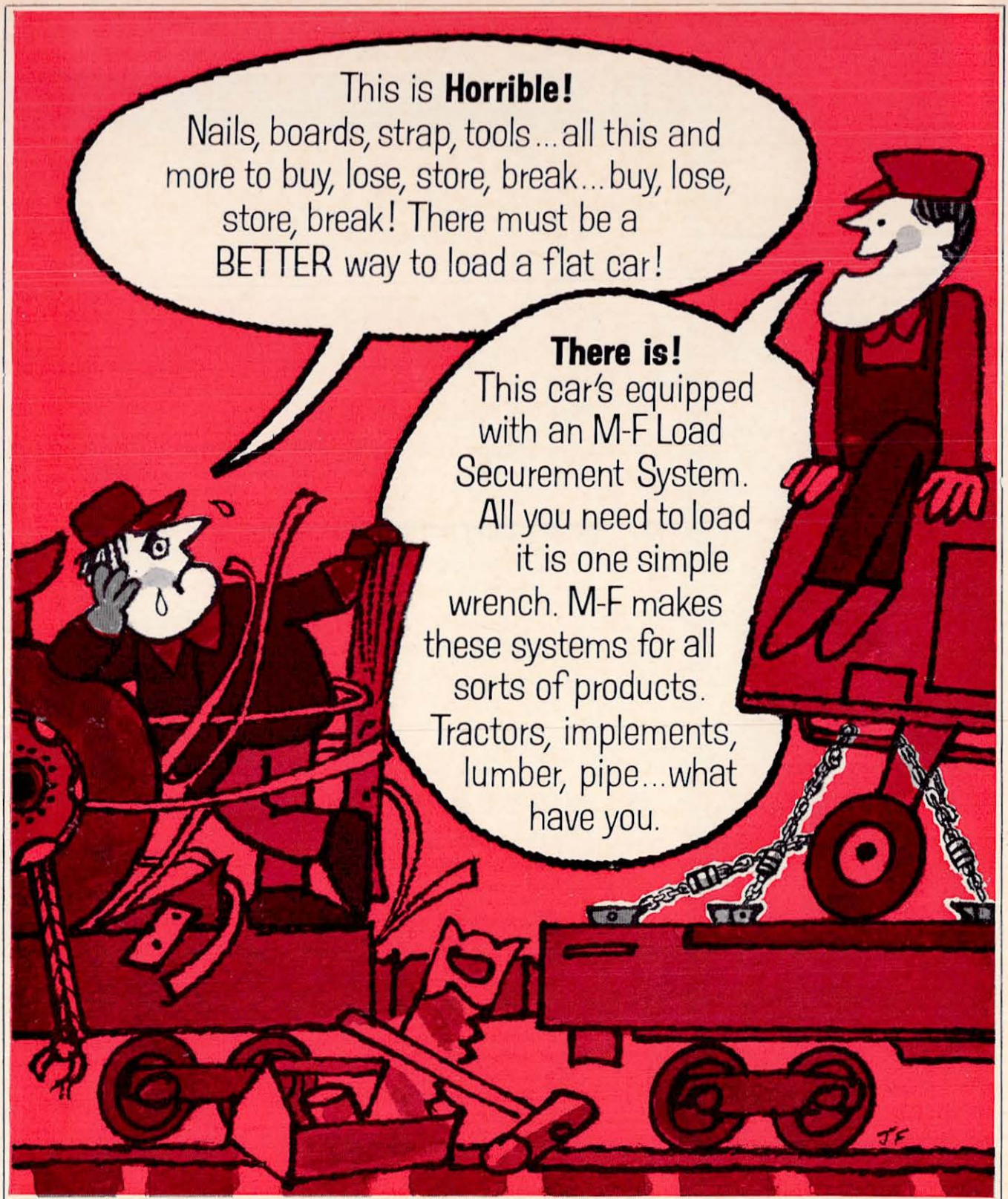
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SHORT AND SIGNIFICANT

Congressional holdup of tax credit is ended

A Senate-House Committee on May 24 agreed on a conference report reconciling different Senate and House versions of proposed legislation to implement President Johnson's call for restoration of the investment credit (see p. 11). A prompt follow-through to final Congressional action was anticipated. The credit is an income-tax arrangement which provides generally for cutting tax liability by 7% of the cost of new equipment or other facilities. The final version would restore it as of March 10 and allow credit for equipment ordered in the suspension period, but undelivered before May 24. It would also raise, effective March 10, the ceiling on credit—to $25,000 plus 50% of any remaining tax liability. The ceiling has been $25,000 plus 25%.

●

Master plan stresses transit

California Governor Ronald Reagan is concerned with studies that don't lead to action—and said so. He appointed a committee of 25 private citizens, mainly in the transportation industry, to survey work being done by state and local agencies and prepare a master plan for transportation in the state. Top priority, it is reported, will go to the Southern California Rapid Transit District plans.

●

Business "blooming" on Japan's New Tokaido Line

Cherry blossom time brings out the crowds—be it Washington, D.C. or Japan—and Japanese National Railways reports that the blooming season helped set a record on the high-speed New Tokaido Line. On Mar. 26, a Sunday, Tokaido Line trains carried a new high of 238,178 passengers, the largest one-day total since the line opened in 1964. Hikari trains were crowded with 6,296 standees, while Kodama trains resembled rush-hour weekday commuter trains. West-bound trains were especially crowded, the maximum load factor being 249% and the average 152%. To accommodate the crowds, reserved cars on many trains were opened to regular fare passengers.

●

Westinghouse Electric plans transport center

Westinghouse Electric will consolidate its growing transport activities in a Transportation Center at Forest Hills, Pa. (just outside of Pittsburgh), according to George W. Jernstedt, general manager of the company's transportation and industrial equipment divisions. The announcement came as Dr. William D. McClelland, chairman of the Board of Allegheny County Commissioners, announced that demonstration and design work will be continued at the Transit Expressway project in South Park. The County Commissioners have authorized $200,000 toward the second phase of experimentation, which will include development and demonstration of automatic switching, improvement of structural design, and further development of operational procedures. Jernstedt said the County contribution will be matched by Westinghouse Electric, developer of the system and general contractor for the original test phase. This $400,000, he added, is expected to attract another $2 million in state and federal support. The new Transportation Center will be the headquarters of the company's Transportation Division, headed by W. P. Bollinger, general manager.

MONDAY MORNING REPORT

An air view of a railroad problem

Millions of words have poured forth at ICC hearings on proposed railroad mergers. But it's likely that little of the verbiage is more significant to the rail industry at large than a few hundred words that went on the ICC record last week. The curious fact is that the man who gave the testimony (in the Norfolk & Western-Chesapeake & Ohio merger hearings) has probably done most of his observation of railroads from the cockpit of an airplane at 30,000 feet. What he had to say about the business he does know best—the airlines—and their future in relation to other modes of transport, had a down-to-earth ring to it.

Runway vs. rail: The competition grows

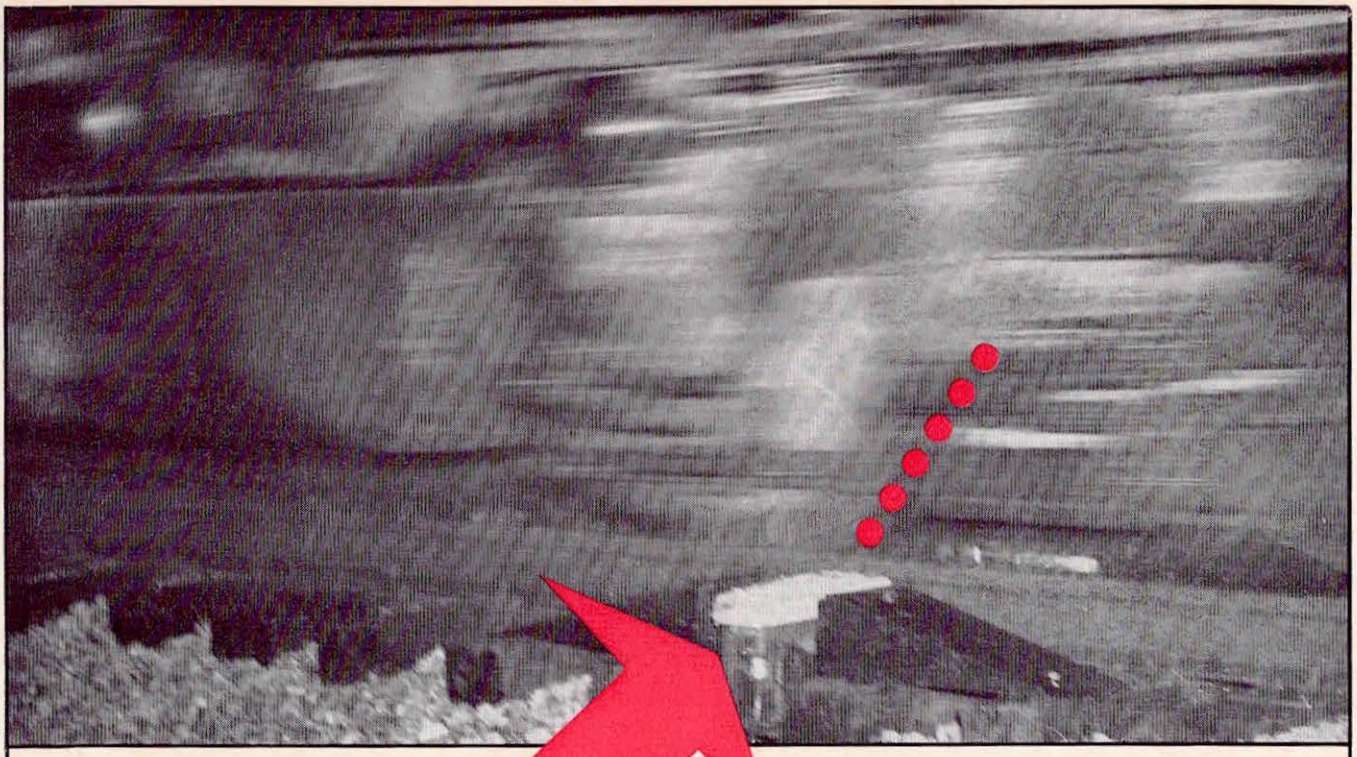
Although seemingly out of place at a merger hearing involving railroads, Najeeb E. Halaby, senior vice president of Pan American World Airways and former Administrator of the Federal Aviation Agency, appeared at the hearing at the request of the N&W and C&O. "I am not an expert on the details of the proposed merger of the Norfolk & Western and the Chesapeake & Ohio," he told the Commission. "Rather my statement is concerned with the development of shipping freight by air and with the increasing competition this mode of transportation will offer surface carriers." The impressive list of facts and figures that he reeled off led most observers to come to one sobering conclusion: Unless surface carriers find ways to cut costs and improve their service, they're going to lose a hefty segment of their high quality merchandise traffic to air cargo carriers.

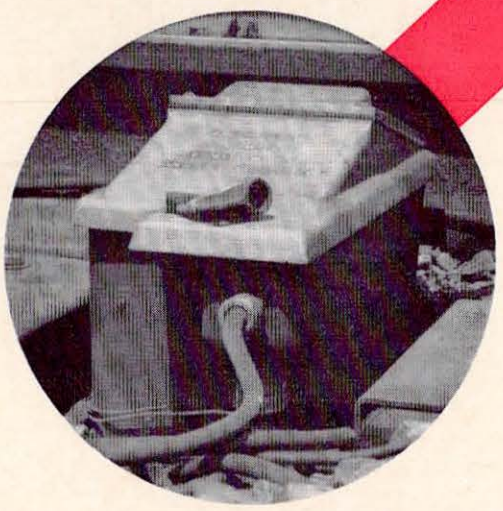
Air ton-miles soar

Halaby pointed out that air carriers nearly tripled their revenue ton-mile volume between 1960 and 1965 (to 2.3 billion), and that this "is only a prelude to the advances that will be possible in the future . . . the potential is enormous." He said new planes now on order and new types of freight-handling equipment will give the air carriers capability to carry a broad range of commodities. These technological advances, he said, should put to rest forever the old idea that the only significant area for the development of air freight is the shipment of extreme perishables in small quantities. Halaby sees the combination of new jets, including quick-change planes that convert from passenger to cargo use, container systems, palletizing, innovative rate-making and increased efficiency in cargo handling on the ground as a combination of factors that will give surface transport modes a run for the freight dollar.

Marketing potential—the sky's the limit

Just as the railroads have found effective marketing to be the key to expansion—piggyback being a prime example—the air carriers are making inroads in certain commodity categories. Specifically, with commodities that are urgently required, perishable, have high value per unit, and are destined for points where surface transport service is marginal. Commodity rates have already had substantial effect on certain kinds of shipments, and, says Halaby, as containerization techniques improve, rate concessions can be expected for the shipper having sufficient volume to capitalize upon their use. The average air freight yield is now 20.5 cents per ton-mile and has been dropping about 2% per year. Halaby's testimony last week spelled out in detail what many air cargo people have been saying in recent months. Estimates of the future growth of the service range from a 50% increase by 1970 to a tenfold jump. But the extent to which air traffic will grow at the expense of the railroads and other surface carriers will hang on two crucial points—how well the ground modes can control their costs and improve their service. A lot will be riding on the outcome.





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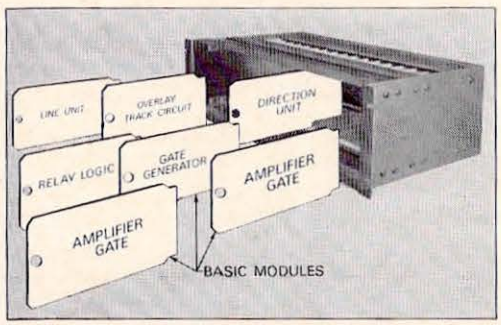

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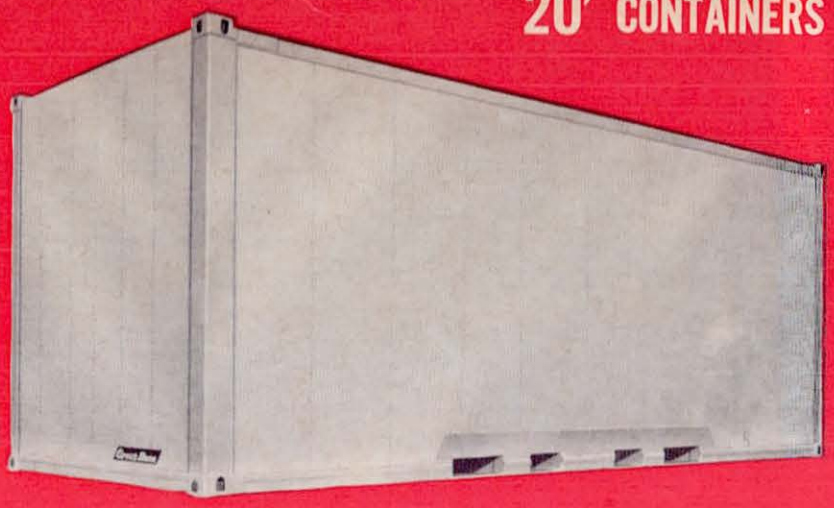

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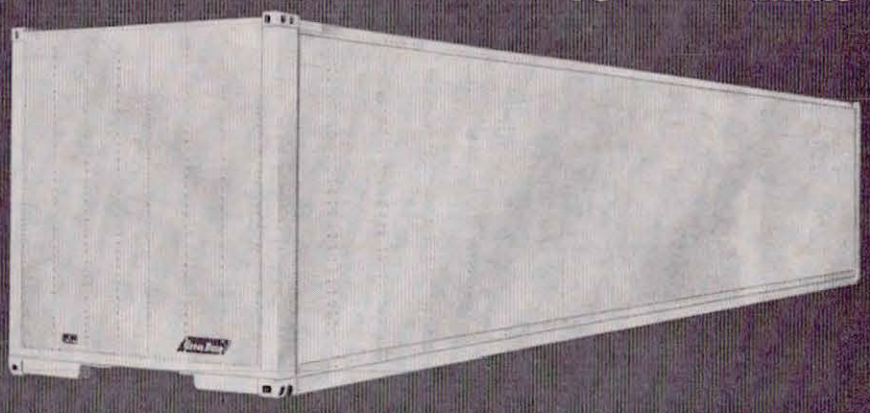

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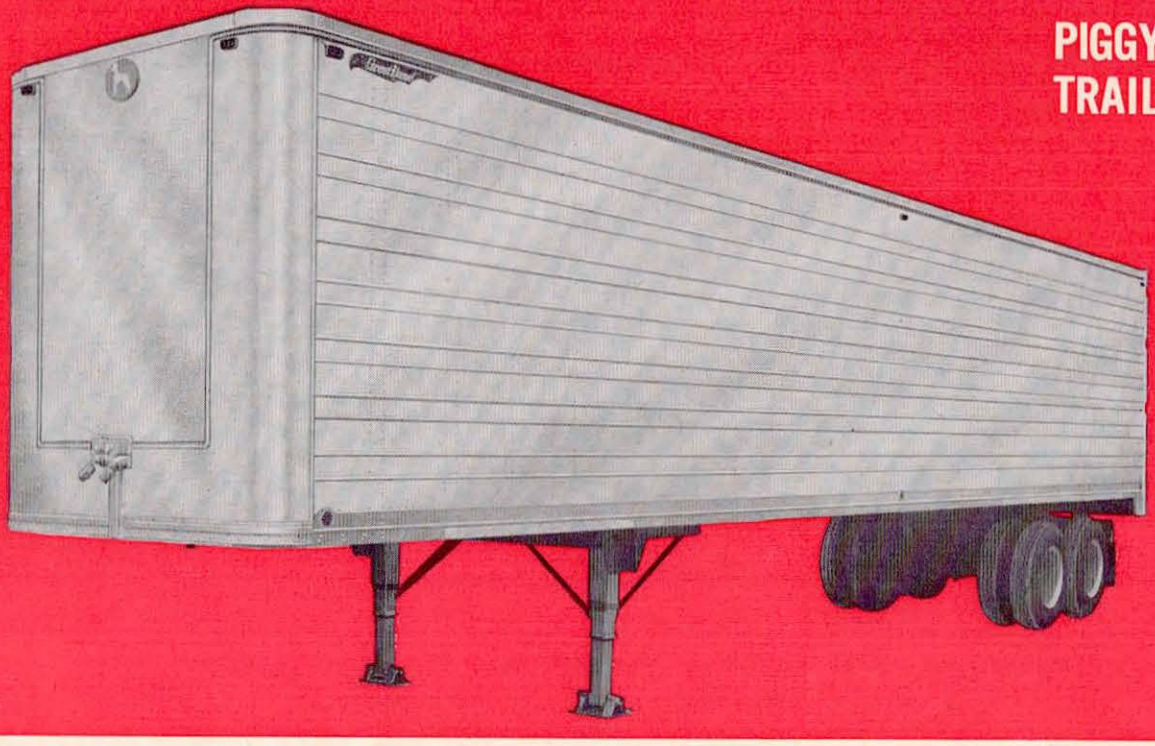

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WEEK AT A GLANCE

Car orders slump; tax credit gets past House-Senate group

Restoration of the 7% investment tax credit finally cleared a House-Senate Conference Committee last week—and none too soon for the railroads. On the same day the conferees reached agreement, there was additional evidence of the severe impact the tax credit suspension had on railroad buying. Orders for new freight cars during April, the American Railway Car Institute announced, dropped to 1,728—only about one-seventh of the number that were ordered in April a year ago.

Restoration of the tax credit will be retroactive to March 10, the day President Johnson asked for reinstatement of the investment incentive (which was suspended last October as an economic cooling off device that proved all too effective). As for orders placed during the suspension, the credit will apply to equipment delivered on or after May 24, the day the Congressional compromise was reached.

Effect of the tax credit reinstatement will be felt immediately. Norfolk & Western announced two weeks ago that it would order $36 million worth of new equipment—1,769 new freight cars and 50 3,000-hp diesels—as soon as the credit was restored. Union Pacific also said it was considering adding $64.5 million to its 1967 equipment program—principally for freight car purchases—contingent on reinstatement of the tax credit.

156 mph: New speed record for D.O.T. testing

A record 156-mph was achieved by the four-car Department of Transportation high-speed research train over its New Jersey test track last week. The Pennsylvania and D.O.T.'s Office of High Speed Ground Transportation staged the fastest train ride ever given any public group in the U.S. as 130 press representatives and public officials observed two test runs between New Brunswick and Trenton. After the specially-prepared 21-mile track was traversed, start to stop in 11 minutes, Dr. R. A. Nelson, OHSGT Director, announced the new speed record. The four electric multiple-unit cars are completely instrumented to record the interaction of track, suspension, carbody and pantograph at ultra-high speed as part of the OHSGT program to fix the capability of conventional railroads for meeting future Northeast Corridor transportation needs.

Scheduled to start late this year will be OHSGT high-speed-revenue-demonstration-service between New York and Washington with the 50 MU cars Budd is now building. Dr. Nelson predicted that the first of two gas-turbine powered TurboTrains being supplied OHSGT by United Aircraft for New York-Boston demonstration runs will be on the New Jersey test track for appraisal during June.

A Wall Street outlook: Profit squeeze for surface transport

The railroads and the truckers are likely to get caught in a profit margin squeeze this year, while the airlines will manage to fly above it, according to Wall Street's Bache & Co.

While acknowledging that freight traffic was heavy for the surface carriers last year, reflecting the booming economy, Bache says freight traffic will grow at a slower rate this year, as general economic activity has slowed down. "This will have a minimum impact on the airlines, which derive only a small proportion of revenues and earnings from freight," says the investment firm.

Restoration of the investment tax credit will help boost rail equipment orders, the forecasters say, but they see a continued softness in demand for new railroad equipment.

As far as mergers go, Bache "finds the longer-term potential enhanced by the presently proposed railroad consolidations." Apart from this the 1967 rail outlook appears neutral to the analysts. The expectation of only modest traffic gains and significant rises in labor and materials costs are seen keeping profits tight until a general freight rate increase can be instituted.

HUD awards transit research grants

At the Institute for Rapid Transit's annual meeting in Atlanta last week, Charles M. Haar, HUD assistant secretary for Metropolitan Development, announced the awarding of five contracts, totaling almost $1 million, to Battelle Memorial Institute, Cornell Aeronautical Laboratory, General Electric's Transportation Systems Division, (see page 93) General Motors' Research Laboratories, and North American Aviation.

Haar went on to say that to pioneer some of the innovations likely to be uncovered the transit industry needs a facility like BART's Diablo Test Track: "Now is the time to bring operators, suppliers, and HUD together to set up a permanent experimental facility which will be available in the future. I would hope IRT would take the leadership in such an undertaking. HUD stands ready to assist."

The five research contracts supplement four contracts awarded last February. Work done under the nine research programs will form the basis of recommendations to be submitted to Congress by March 1968 for a program of research and development of new transportation systems for the nation's urban areas.

Battelle Memorial Institute will assist HUD in the over-all research and development project; the Cornell group will analyze the merits of a bimodal small vehicle transportation system; General Electric will investigate electronic command and control systems; General Motors will study how to introduce newly-designed systems into metropolitan areas; and North American Aviation will be concerned with aerospace, atomic, defense and other advanced technologies and how they may relate to urban transportation.

GUS WELTY'S LINES ON LABOR

WELTY

THE BOOKCASE TIPPED OVER last week, and out of it came tumbling a book which ought to be read periodically by anybody who tries to keep a level and otherwise impartial head on such tinged-with-emotion matters as management-union relations. The title of this well-thumbed book—and it really is—qualifies as a cliche: Men and Machines. But the content is something else again. This volume was written a few years ago by a man named Louis Goldblatt, with excellent photography by Otto Hagel, and with the sponsorship of the Pacific Maritime Association and the International Longshoremen's & Warehousemen's Union. It is, in brief, the story of how management and a union—sworn enemies, or so it seemed—made modernization and mechanization work, to the benefit of both men and management.

MEN AND MACHINES tells the story of how the West Coast waterfront went from jungle to civilization in operations and in the PMA-ILWU relationship. It tells how agreement was reached in collective bargaining—without third-party intervention—to enable management to manage efficiently and to enable employees to share in the benefits.

THE REAL STORY, however, isn't told in the original book. It's told in a little supplement published last year, when the original agreement was updated. Now, benefits have been increased. But here's the three-part kicker: (1) At the suggestion of the union, a wage-guarantee feature of the original agreement was dropped; (2) a no-layoff provision was also eliminated; and (3) the union asked for and got a provision that machines—labor-saving devices—be used wherever possible.

THE AGREEMENT and its updating cost the operators money—there's no dispute on that. But it seems to have been worth it. Take, for instance, the comment made on the elimination of the original wage-guarantee: "Because tonnage had increased beyond all expectations, the wage guarantee had never been used. Work never dropped to the point that the men earned less than 35 straight-time hours' pay. Indeed, together with the increased attrition rate, the rise in tonnage handled made it necessary to add some 2,000 men to the work force."

HE TAKES A CHANCE, who tries to draw parallels between one industry and another, between one set of work rules and another, between one group of managers or union chiefs and another. But, some think, he takes a bigger chance who doesn't look for applicable knowledge, wherever it may exist.

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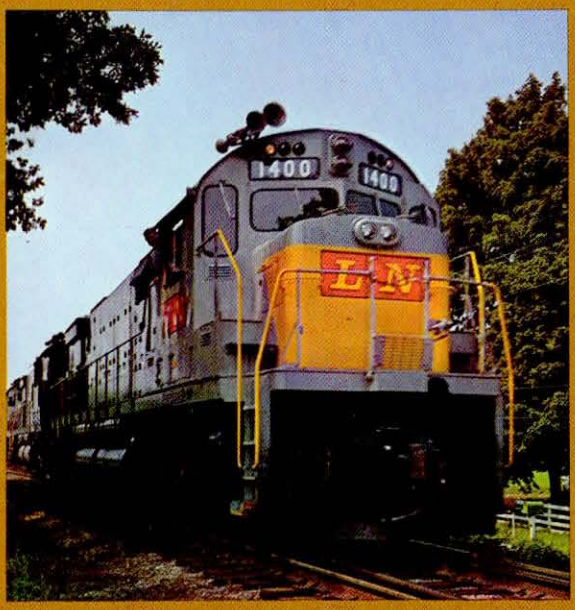

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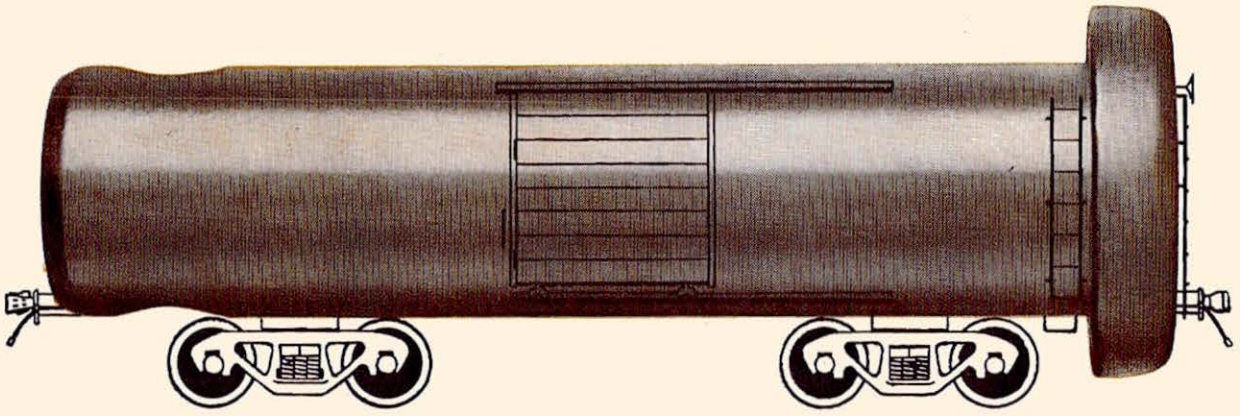

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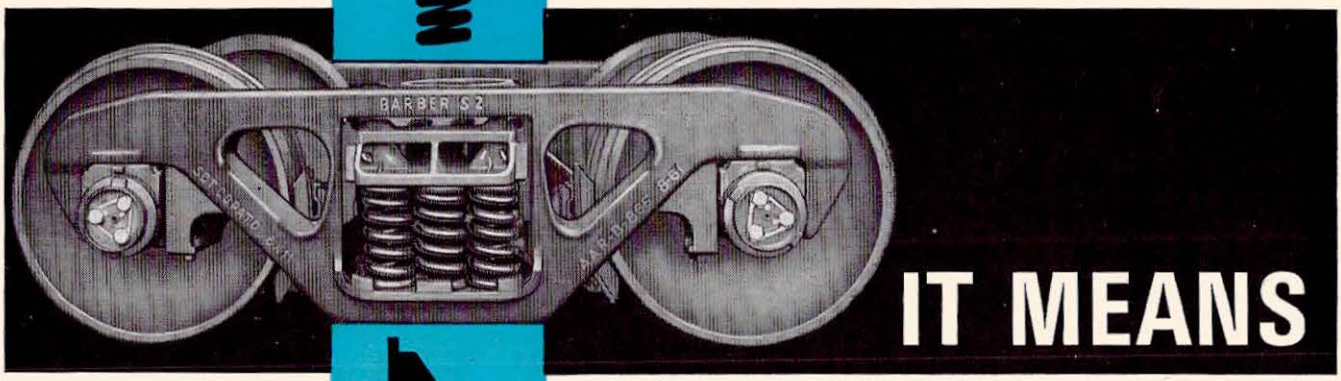

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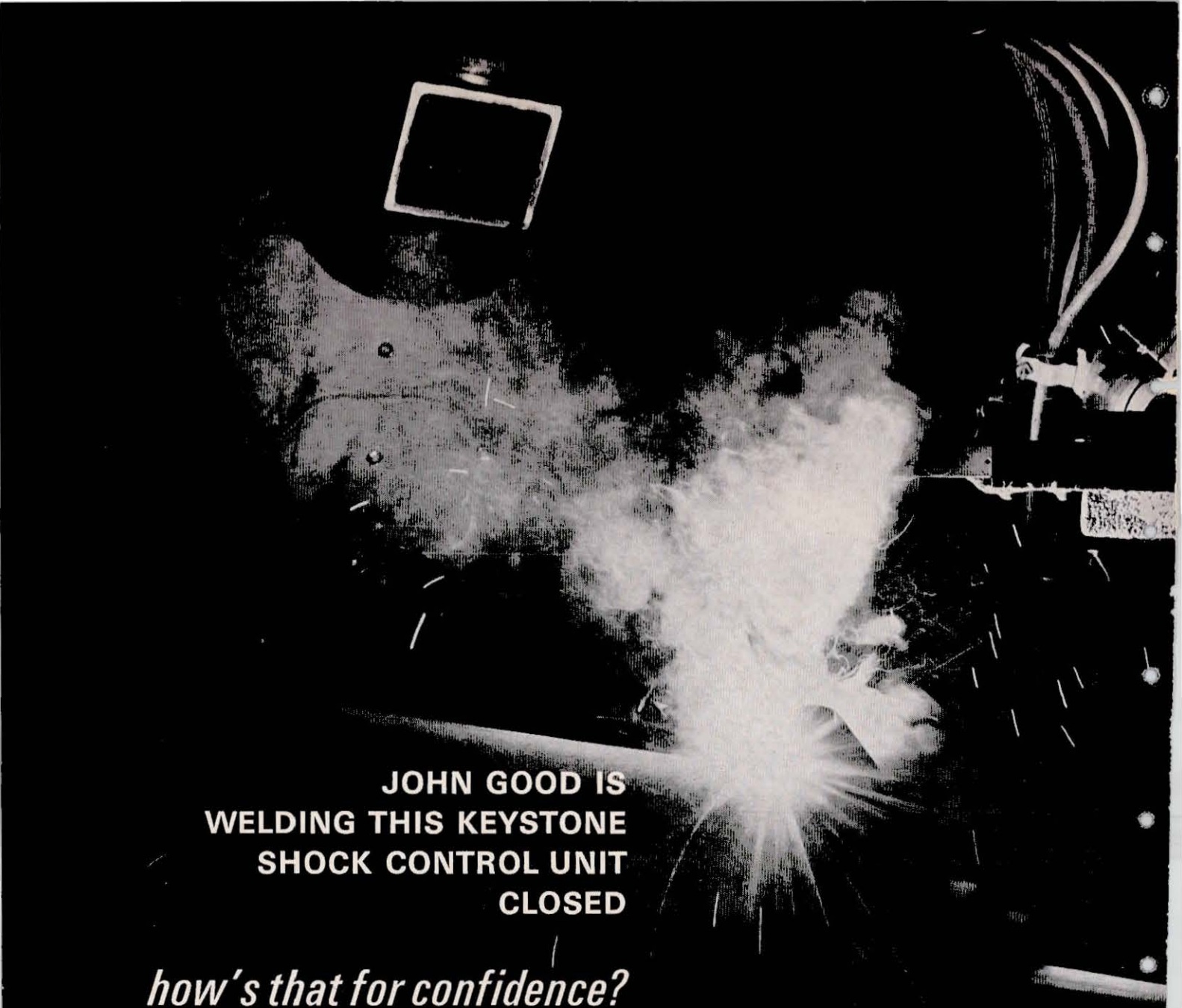

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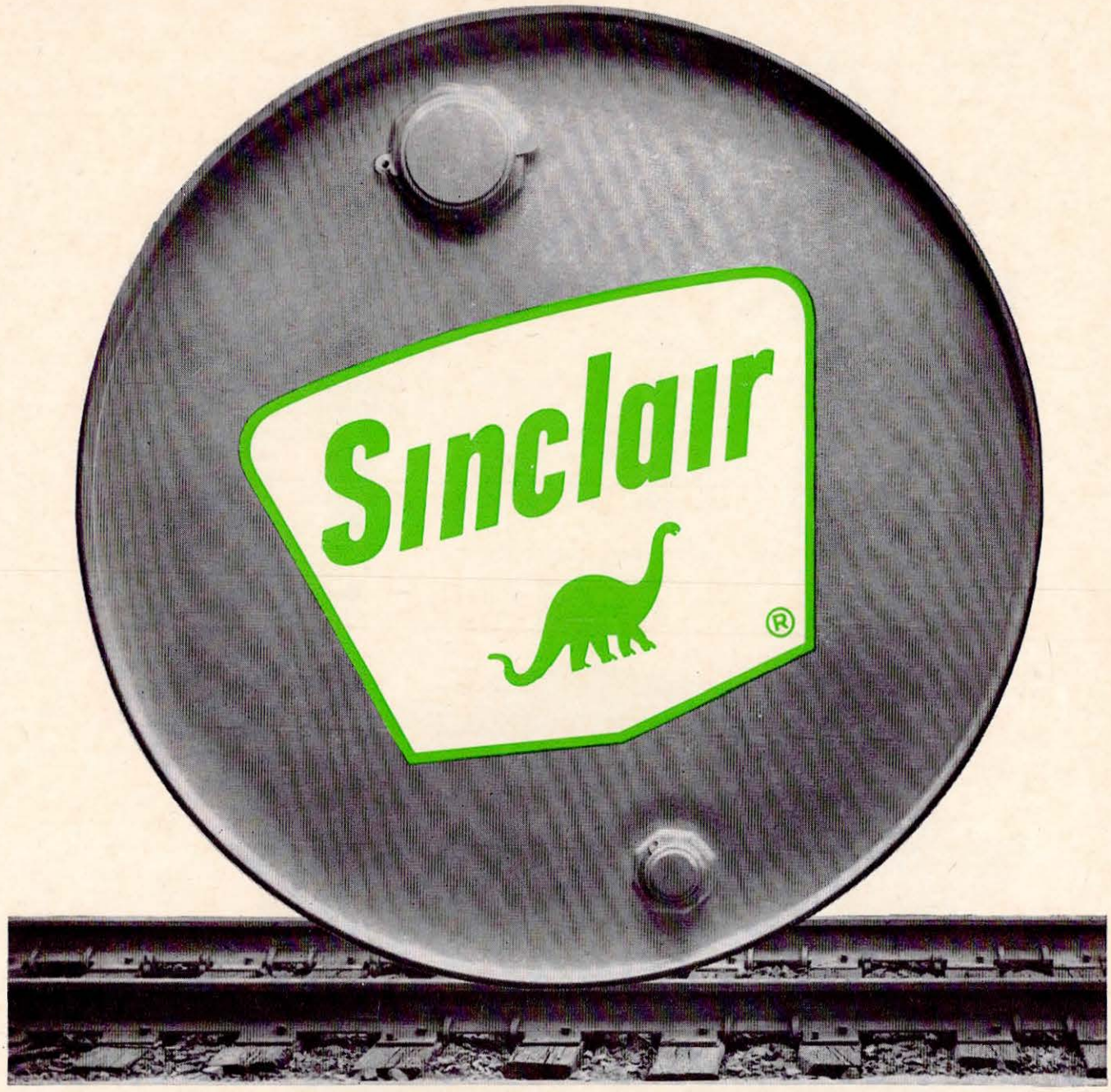

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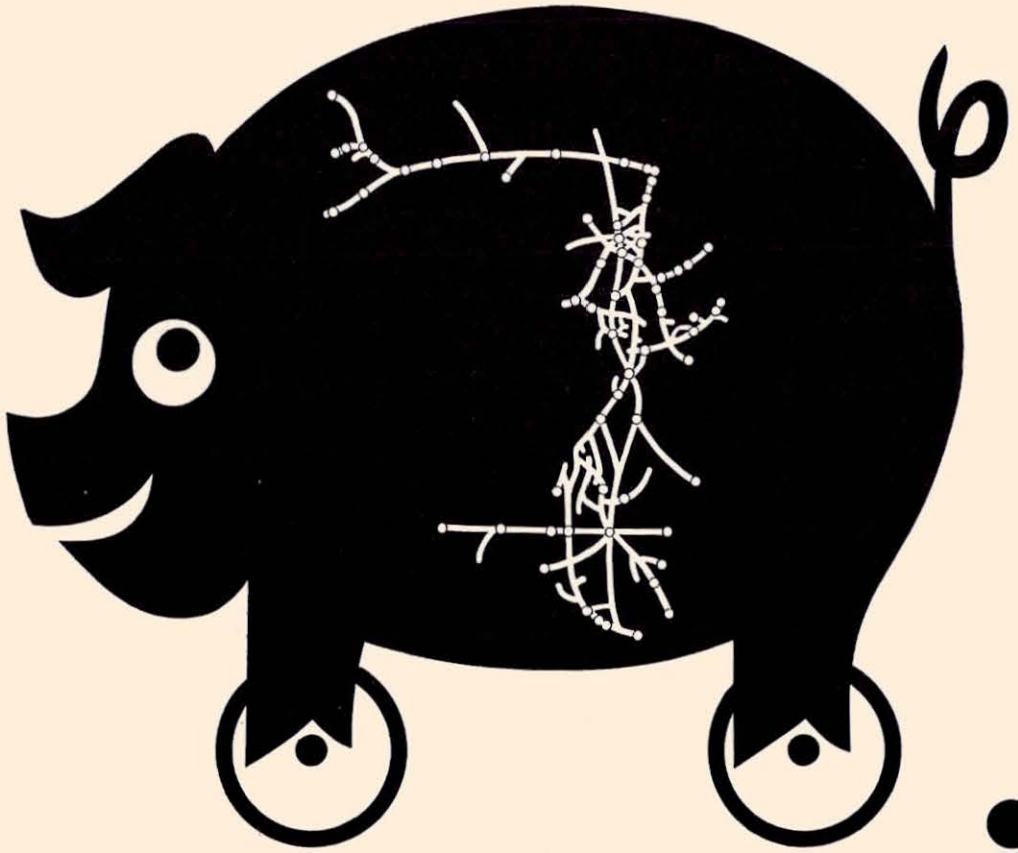

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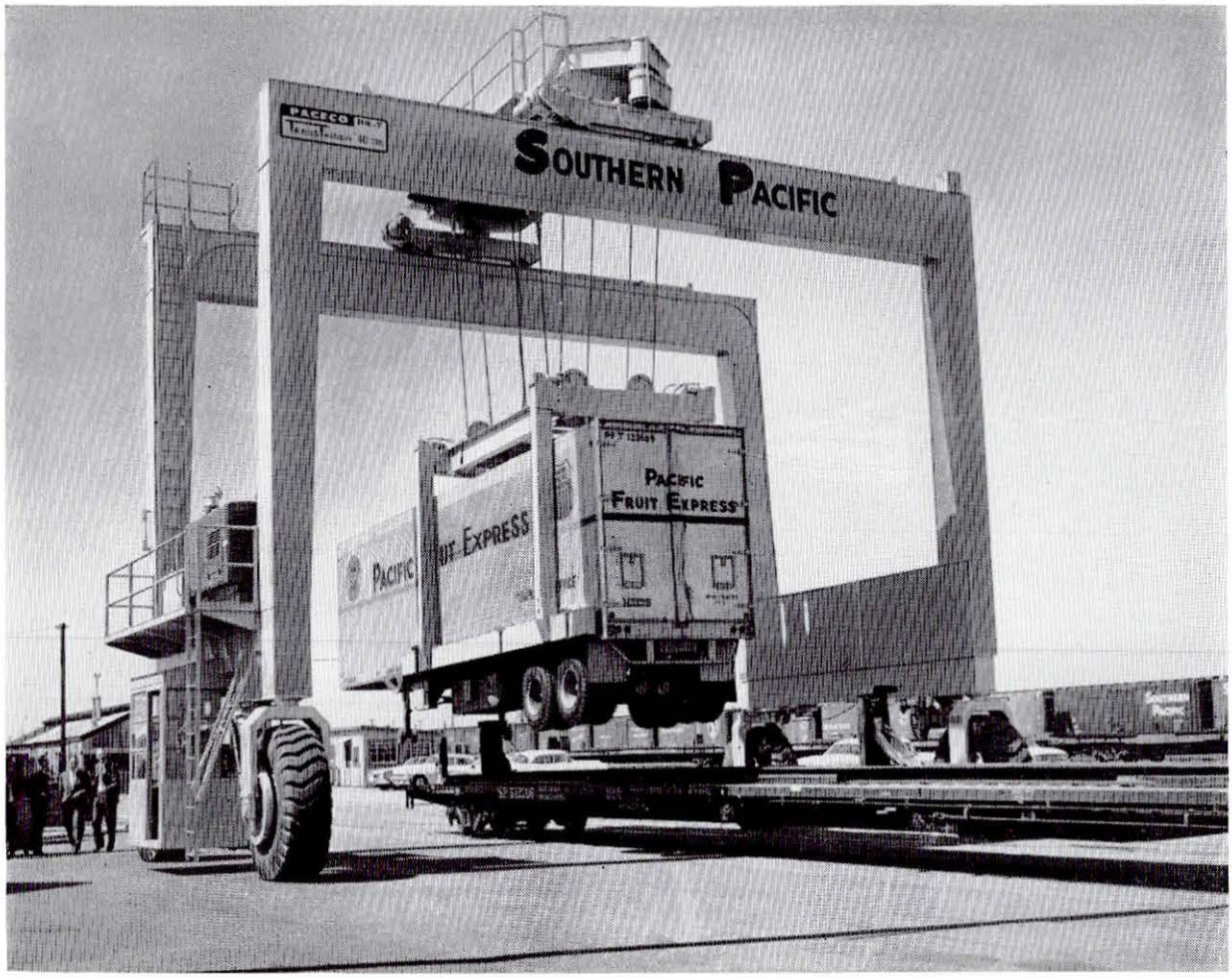

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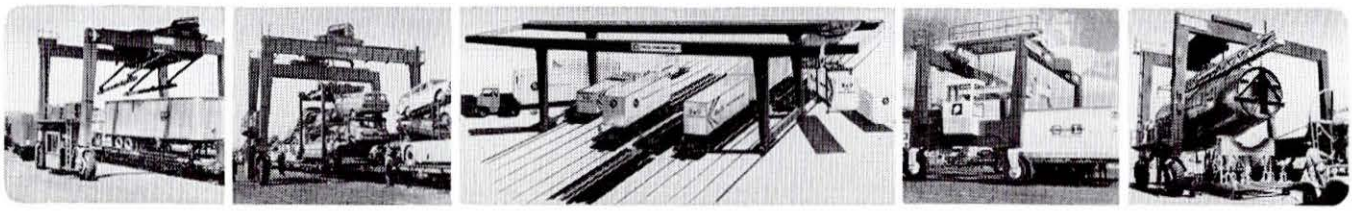

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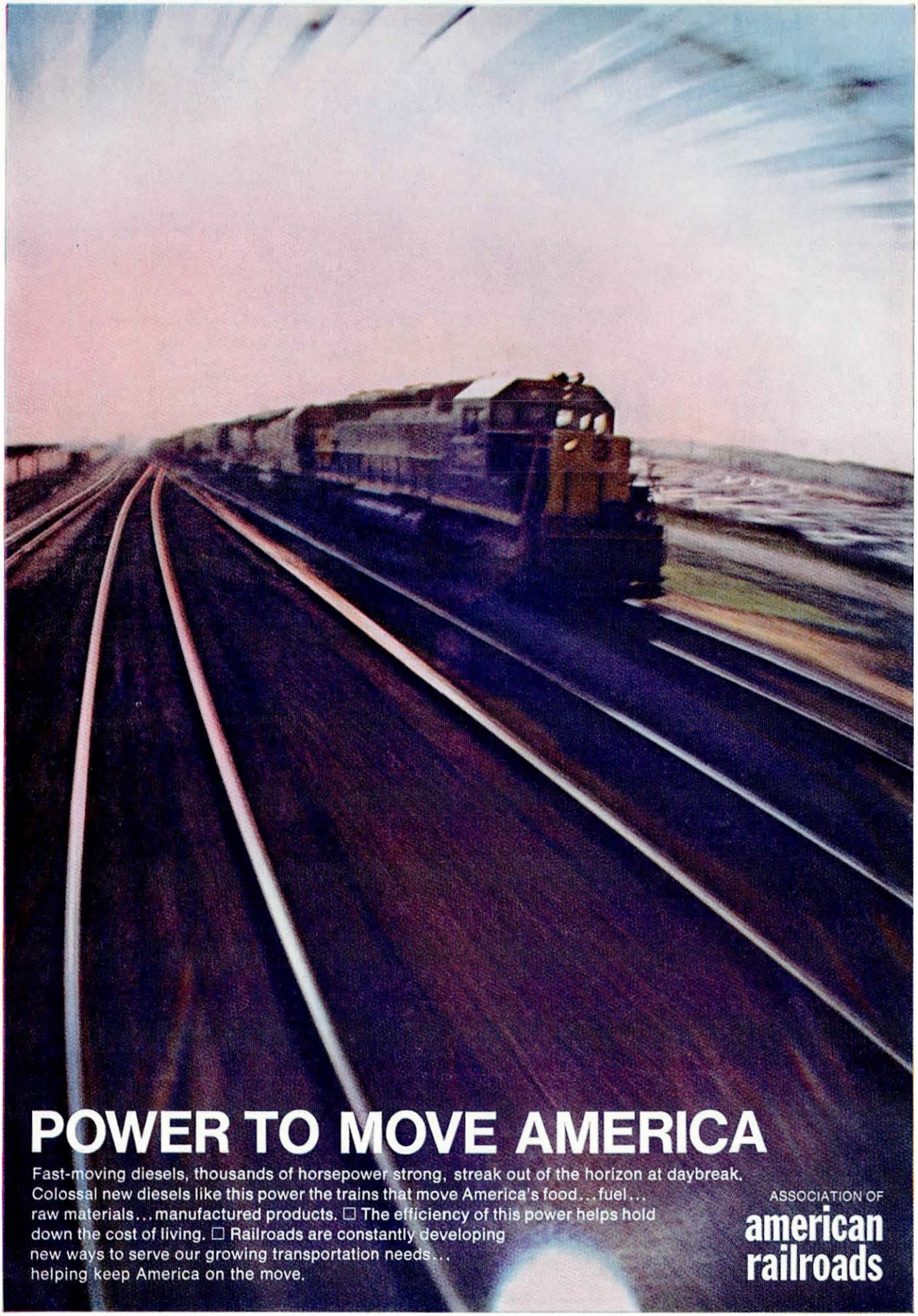
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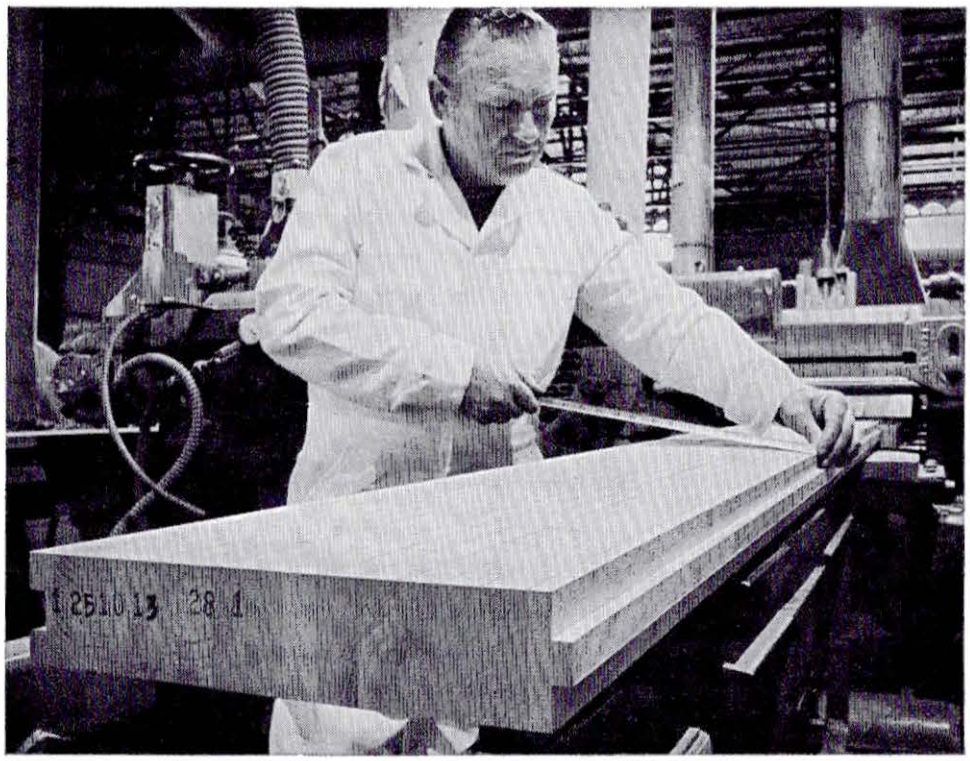

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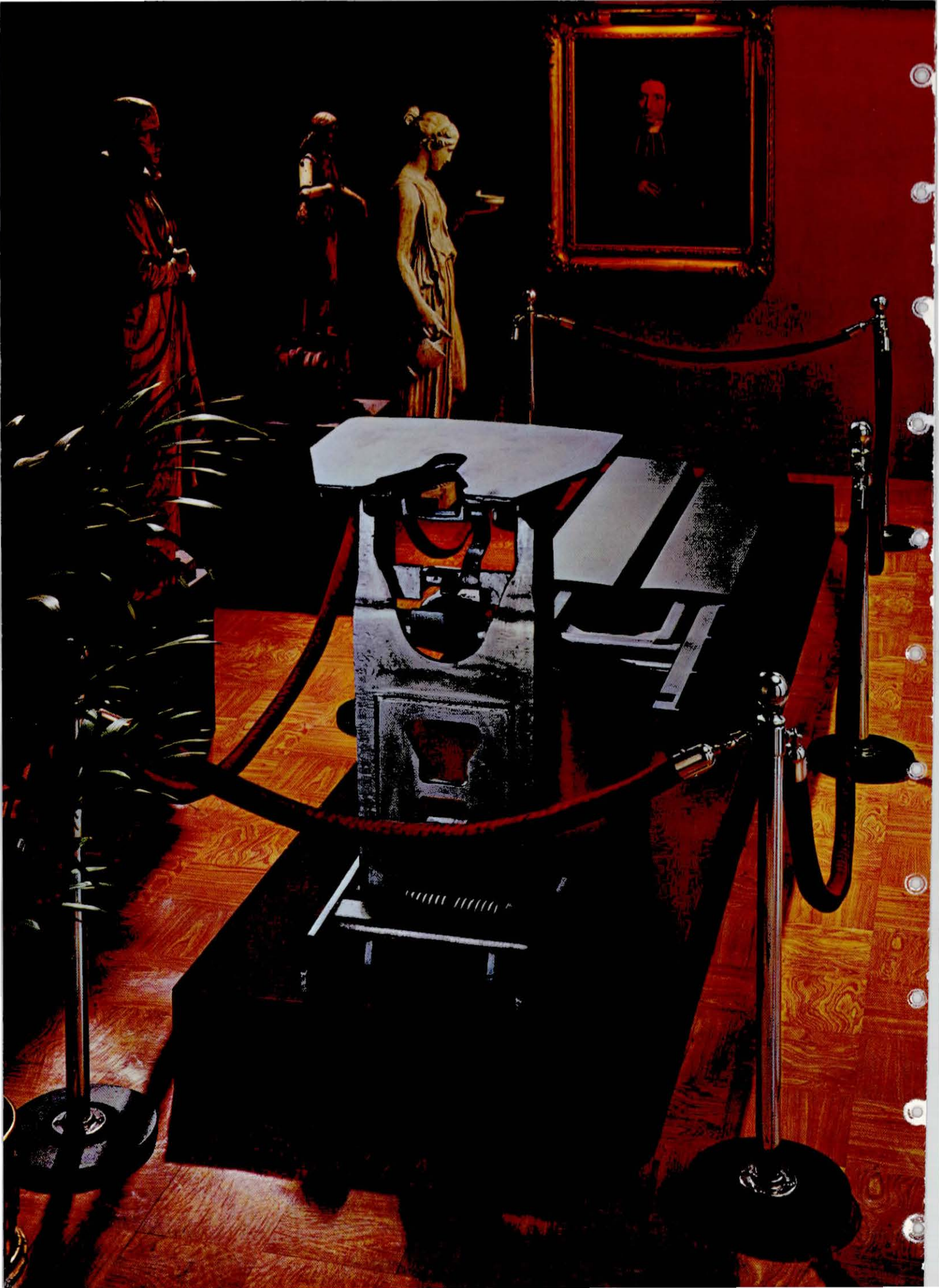

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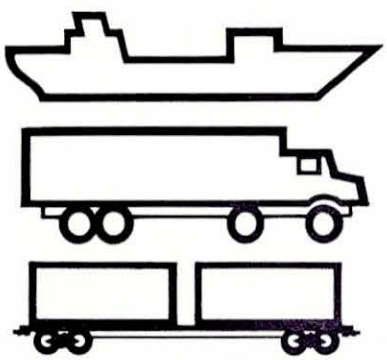

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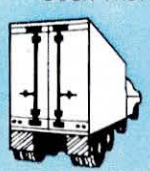

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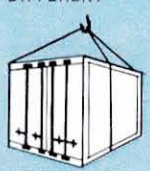

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TOFC/COFC: Why the future looks so good

TOFC/COFC carloadings are expected to top the 2.6-million mark by 1972, and total revenues from such service could be well over $1 billion.

By GUS WELTY

The word for piggyback's growth in the '60s is "spectacular." The word for piggyback's growth well into the '70s will also be "spectacular."

At this point, even the conservative projections for TOFC/COFC are startling. And the most far-out forecasts would have to be labeled unbelievable, except for one thing: Over the past decade or so, the men running the piggyback end of the business have had a way of making the impossible happen.

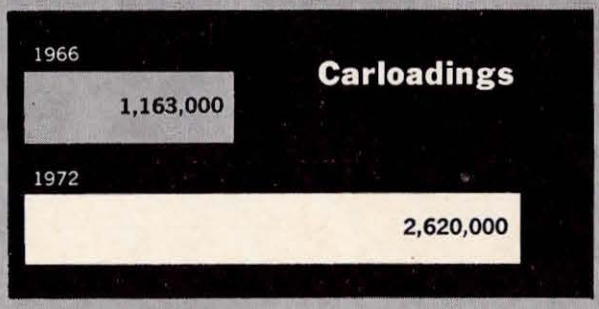
They'll have their work cut out for them—first, in overcoming piggyback's rather disappointing start in 1967, and then in gunning for the long-range targets which they, themselves, have helped set.

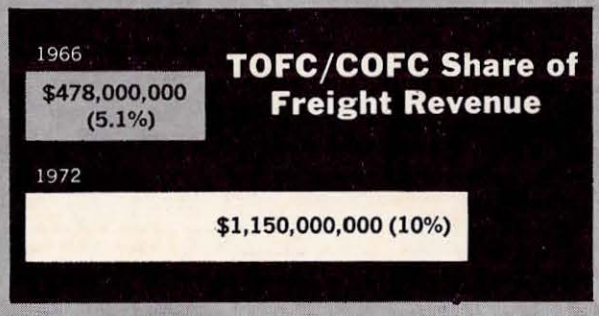
In a way, piggyback's less-than-inspiring performance this year can be written off as just one of those things. The economy developed certain soft spots. Wretched weather hit much of the country. And the recent strike-lockout situation in the trucking industry applied the clincher. Result: TOFC/COFC showed a growth rate of only about 6% over the first four months of '67, and that's just half the rate that had been forecast.

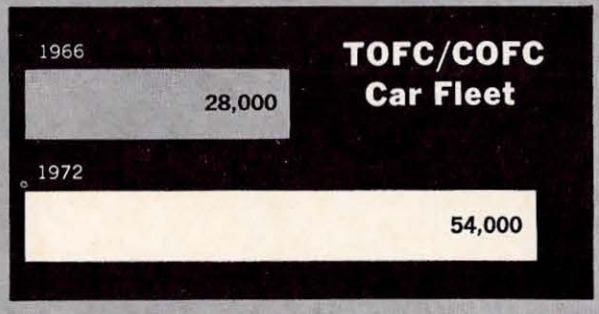
● **Good, better, best.** Disappointment, however, shouldn't be mistaken for dismay. A Railway Age survey of major TOFC/COFC operators turned up absolutely nobody who expects the rate for the year to drop below 10%—and several roads, all in western territory, are predicting loadings and revenue increases in the 30%-to-40% range.

Even more impressive is a forecast worked out by

WHAT THE EXPERTS PREDICT







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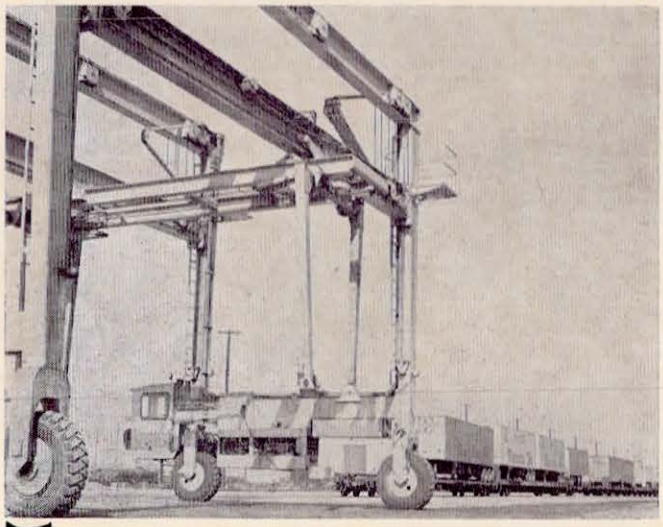
TOFC/COFC can only be as good as ground-support facilities permit—and piggyback's fixed plant is coming in for more and more attention. The end-loading ramp is still the mainstay of the business (1), but the speed and flexibility of overhead loading (2) and even new side-loading techniques (3) may make this kind of specialized equipment, or something like it, a necessity at major terminals. And off in the future, perhaps, there's something like the overhead, automated container transfer yard sketched by A. T. Kearney, as part of a continuing terminal research program (4). The basic concept involves bringing a train in, locking it in position and then unloading containers a block at a time. As Kearney people describe the layout, a large terminal might provide for unloading 20 cars at a time, with 20 cranes in simultaneous operation. Cycle time for 20 cars would be in the neighborhood of two to three minutes for a short haul from track to parking position, about eight minutes for the farthest carry. Angle-parking makes each chassis in the yard available at will to a driver. Key to the operation is precision work.



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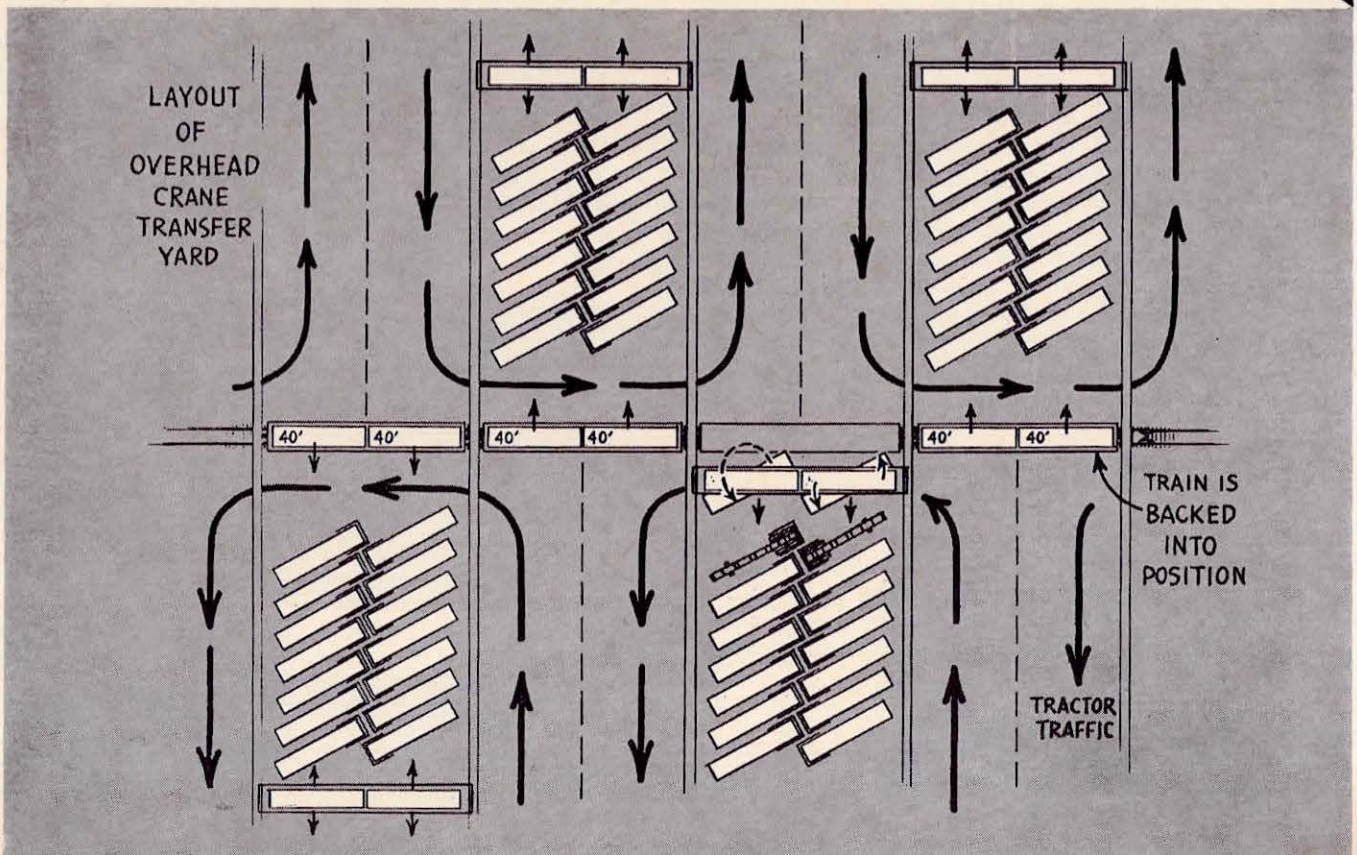


P. L. Cowling, president of the National Railroad Piggyback Association and the man who heads up the Milwaukee Road's piggyback operation. Cowling's looking ahead to a 1972 that will show:

—TOFC/COFC carloadings topping the 2.6-million mark.

—More than 4.6 million trailers and containers handled in revenue service.

—Total TOFC/COFC revenues of well over $1 billion.

—More than 50,000 flat cars and close to a quarter of a million trailers and containers available for TOFC/COFC operations.

Far-out? Perhaps. But the predictions some people were making a decade ago seemed far-out then—and they turned out to be conservative. Cowling himself takes a cool view: "Sure, we had to do a lot of projecting, but the figures we used weren't just pulled out of the air. We did a lot of figuring, and we have good work papers to substantiate the predictions—wild as they may seem."

● **Everything's up.** As it happens, Milwaukee Road itself offers one of the top examples of individual optimism. TOFC loadings last year showed a 49% increase, revenues were up by almost 65%. For '67, the road is forecasting a carloadings gain of 34% and a revenue increase of 42% from the substantial base created in 1966.

For the next five years, Cowling estimates the rate of gain at 15%, compounded. And, while TOFC accounted for 4.5% of total Milwaukee loadings and 5% of gross freight revenues last year, Cowling figures that his end of the business will be contributing about 9% of loadings and revenues in another five years.

Where will the growth be concentrated? "In my opinion, Plans I, III and IV will continue to grow at a considerable rate because of the exceptional bargain in transportation charges that these plans offer to shippers and to common-carrier truck lines. I don't believe there has ever been a greater transportation bargain offered by railroads than these three piggyback plans—and as a result, more and more shipping via these plans should be expected. Then, too, the trend in medium and light industry to locate in outlying or rural areas—in localities perhaps not served directly by railroad—will tend to help piggyback growth. These industries will still be able to obtain good, consistent rail service via TOFC."

● **In the West, confidence.** Milwaukee, however, will have to run hard to outpace its neighbors in the West. Those western roads may not be able

Computers can smooth the way

Nobody really likes to talk of such mundane things as rates and tariffs in a discussion of that glamor-child, piggyback. But like it or not, some people think it's high time railroads concentrated more attention in this area—and one of these people is Herbert O. Whitten, former senior consultant-revenue research for Chesapeake & Ohio, now president of his own consulting firm in Washington.

Whitten had rather harsh things to say, at a recent National Railroad Piggyback Association session —but he softened the comment with an intriguing outline of benefits which TOFC/COFC might realize through a systems approach to rate and tariff computerization.

● **Watch the competition.** In the first place, Whitten pointed out, "the prime competitor of TOFC and container service, the motor carriers, are rushing pellmell to computerize their rates and tariffs. This will result in substantial cost savings to them, with faster quotation service and more information on which to run their business and make improved decisions. I expect this to greatly increase the competition which you, the railroads, have for TOFC service."

As he sees it, TOFC would actually provide an excellent opportunity for the industry to initiate a systems approach, for a variety of reasons:

—The service "represents the most direct competition with motor carriers, who are now active in the field of computerization."

—Piggyback "represents a complete sub-system of transportation within the railroad industry. It's normal to find independent groups for operations, rates, sales and accounting, the people working in this area are used to cooperating with each other; and finally TOFC is the most easily-isolated section of the railroad industry for a departure from normal practice."

—TOFC tariffs "are the most volatile and active of any of the rail tariffs. They're supplemented almost weekly and they're re-issued in most cases about every two years."

—If they're published in attractive and usable form, the new tariffs could become "valuable sales price lists for individual companies and the industry, even further increasing your already substantial rate of growth."

● **How about cost?**—Further, Whitten told NRPA members, computerization of all piggyback tariffs could be done "relatively inexpensively. There are perhaps 100 different piggyback tariffs in the United States. There are about 65 railroads offering the service. Without having made a feasibility study, I suspect that all of the piggyback and other necessary tariffs can be computerized and systematized for a relatively nominal amount. I'm certain it would represent a true bargain—and I believe it could be done in a period of two years.

How about the benefits? These were on Whitten's list:

—Substantial amounts could be saved in tariff publication and supplementing costs.

—Rate quotations could be obtained rapidly and accurately, saving time and money for the railroad and its customers. Currently, "I have heard of many cases where shipments have been held up a week or more, waiting for a rate quotation."

—Substantial sums could be saved in rate-search, billing and accounting.

—Piggyback operators could obtain a "tremendous increase in capacity and a capability to handle the rapidly-increasing rate of growth in the rating and related paperwork area."

—Management could receive faster and better information for decision-making, and at less cost. Cost information "could be tested directly against specific rates issued, testing both your own costs and those of your competitors to measure the competitiveness of your pricing. And you could obtain data on the effectiveness of your pricing system—which rates move traffic and which don't."

—Management could be provided with "an extremely valuable testing ground for the entire systems approach to rate and tariff computerization. The cost would be comparatively low — and the long-run potential savings run into the hundreds of millions of dollars."

In Whitten's view, the opportunity is there for the railroads to grasp—and "the investment . . . may be returned a thousandfold, through cost savings and increased traffic."

to agree on such things as mergers, but on TOFC/COFC, they're unanimous: The boom is solidly-based, and it's going to continue. Here's a sampling from the current Railway Age survey:

—Santa Fe closed out 1966 with increases of more than 23% in piggyback loadings and more than 20% in revenues. The projections for 1967—and for the five years to follow—peg the growth rate for both loadings and revenues at 18% to 20%.

—Frisco checked in with a 34.3% increase in loadings last year, and a 28.9% jump in revenues. The '67 forecast calls for a 20% increase in loadings and a gain of about 15% in revenues. And by 1972, Frisco figures piggyback business will be about double the current levels.

—Union Pacific showed 1966 gains of more than 20% in both carloadings and revenues. For '67 and beyond, UP looks for increases of around 12%, with piggyback eventually accounting for about 10% of gross freight revenues.

—Illinois Central figures fit the same pattern: TOFC carloadings last year climbed by 24.5%, revenues were up 20.8%. For 1967 and on into the '70s, IC sees increases of about 10%, compounded. And IC, too, estimates that piggyback can total 10% of revenue freight business (compared with its 1966 contribution: 2.5% of total carloads handled and 3.86% of gross freight revenues).

—Northern Pacific enjoyed an 11.4% increase in trailer loadings last year, expects a 15% gain in '67 and predicts a continued climb in the 12%-to-15% range for the next five years.

—Missouri Pacific sees substantial increases in piggyback business, though percentage indicators will drop slightly as the base gets larger. MP last year boosted loadings by 17.5%. Its truck-rail traffic men are forecasting a 15% gain this year, with increases of 10% to 12% in the 1968-72 period.

—Rock Island rode rate, service and equipment improvements to a 16.9% piggyback revenue increase in 1966. Among RI's major moves: Acquisition under lease of new trailer equipment in such volume as to bring replacement of virtually the entire existing railroad fleet. The five-year TOFC outlook is for annual increases of 15%—and for piggyback to account for about 15% of gross freight revenues by the end of the period. Currently, RI is running well ahead of 1966, with TOFC revenues up 42% and trailer loadings up 31%.

—Western Pacific, operating on a somewhat smaller base than some of its larger neighbors, had what shapes up as one of the West's biggest rates of gain last year. 50% in loadings and 58% in revenues. Increases for 1967 are pegged at 15% and 22% respectively, and the five-year forecast holds at 10% to 12%. WP also shows one of the industry's highest figures on piggyback as a percentage of total business, with TOFC accounting for 9.7% of total carloadings and 6.7% of gross revenues, but these figures are expected to stabilize at 6% to 8% in the early 1970s.

TRAILER LANDMARK

Here's a scene that may be repeated many times, for many landmarks in equipment acquisition, as TOFC/COFC continues to develop. J. W. Plant (left), Atlantic Coast Line assistant vice president; Palmer Bayer (center), vice president and general manager of REALCO; and T. K. Dorsey, executive vice president and sales manager of Dorsey Trailers, got together to celebrate the delivery of REALCO's 10,000th trailer. And the photo was outdated almost as it was taken. REALCO took just a month and a half to go from 10,000 to 11,000.

—Rio Grande, also operating on a smaller traffic base, came up with increases of about 35% last year in both loadings and revenues. Current forecasts show likely increases of 30% this year and 15% annually for the next five years or so. Perhaps significantly, however, Rio Grande expects piggyback to account for about 10% of total freight business by 1972, and that's a big jump from the '66 report which saw TOFC amounting to less than 1% of carloadings and freight revenues.

—Soo Line hasn't ranked among the leaders in piggyback, but Soo nevertheless closed out 1966 with a TOFC-loadings increase of 19.5% and a revenue gain of 4.7%.

That's by no means the whole story in the West. Four other major piggyback operators also posted significant increases, and unlike most western roads they turned in greater percentage increases in revenues than in loadings. For the most part, this quartet sticks close to the pattern-projection for future TOFC development, with an exception: One road looks for piggyback to be accounting for about 20% of its total carloadings and revenues early in the 1970s.

• **Eastern roads doing well.** In the East, the picture's no less bright, as major TOFC/COFC operators see it:

—Chesapeake & Ohio/Baltimore & Ohio posted impressive gains in revenue trailers handled last year, 9.5% for C&O and 21% for B&O. But even more impressive were the revenue increases, C&O's 14% and B&O's 26%. Forecasts for '67 see revenue growth of better than 11% for C&O and of about 18% for its partner. For the five-year period ahead, the outlook remains bright: Revenue-increased projections stand at 15% for C&O and 20% for B&O through 1972, by which time piggyback will likely add up to 12% of C&O/B&O total merchandise revenues.

—New York Central contiues to do great things with Flexi-Van. Last year, vans handled topped 150,000, for an increase of 22.9% from 1965 levels. Revenues were also up substantially. Then, F-V started out 1967 with a bang, posting a 22% traffic increase at a time when the national increase in piggyback traffic was running at about 5.5%.

—Norfolk & Western, building piggyback business steadily, came through with a 14.6% increase in loadings last year, and an 18.1% gain in revenues. And on that bigger base, N&W is looking for increases of 8% and 13%, respectively, in '67. For the long-term, the projected rate of increase is 10% annually. And by the end of 1972, the road figures that piggyback may be contributing 7% of total carloadings and as much as 9% of revenues.

—Pennsylvania, one of the first into piggyback and still the biggest, went up again last year. PRR handled more than 240,000 loaded trailers, or a bit more than one-eighth of the industry total. And the road isn't looking for any slump this year or over the next five years.

—Erie Lackawanna showed an average piggyback loadings increase, 11%, but was able to turn that into a 17% increase in revenues. E-L projections contemplate a 10% boost this year, with perhaps a slightly higher rate of growth in succeeding years. From the standpoint of piggyback's contribution

to total business, however, the road is a standout. TOFC represented 11% of carloadings and 15% of total freight revenues in 1966, and E-L people think the early 1970s may see piggyback accounting for as much as 25% of total freight business.

● **No slump down South.** That leaves the Southeast—and by this time, it should be no surprise that southeastern roads are right up there with eastern and western carriers in projecting substantial TOFC/COFC gains. Here's the lineup:

—Atlantic Coast Line wound up 1966 with increases of 18.8% in piggyback loadings and 14.5% in revenues. This year and in the years ahead, ACL figures on a 15% increase in TOFC business. And the road's piggyback department also is looking for the operation to be contributing about 15% of total freight business early in the next decade.

—Seaboard Air Line, which will be merged with ACL by the time the next special-report on piggyback comes out, has a similar report to file. Loadings and revenues were up by close to 19% last year. There's a forecast of a 15% increase this year, and of a 12%-to-15% growth rate over the next five years.

—Southern posted a 15.3% gain in TOFC/COFC volume last year, and the outlook for '67 is for "continued growth." Profitability of the service is also expected to be improved as a result of operating efficiencies instituted in '66.

If it's assumed that these individual forecasts are on the conservative side, it's not really too big a jump to the "wild-as-they-may-seem" projections of the Milwaukee's Laurin Cowling.

● **TOFC/COFC, 1972.** Point-by-point, here's how he breaks it down, 1972 compared with 1966.

—The year just past was a good one, with better than 1.1 million piggyback carloads and 1.9 million trailers handled. But 1972 will see the recording of more than 2.6 million TOFC/COFC carloadings and more than 4.6 million loaded trailers and containers handled. The growth rate, '72 over '66: 125% in loadings, 140% in units handled.

—TOFC/COFC revenues in 1966 totaled about $478 million, or a bit more than 5% of total revenue. But in 1972, the revenue contribution will be $1.1 billion, just about 10% of gross revenues.

—The piggyback car fleet in 1966 amounted to about 28,000 units, with Trailer Train providing all but a few thousand cars. In 1972, the fleet will be about double the '66 figure.

—In '66, the fleet of available trailers and containers totaled about 100,900 units, including containers owned by steamship lines. In '72, the combined fleet will be within reach of the 250,000 mark.

● **What happened in '66?** By comparison with 1972, 1966 looks like just another year in the sometime-to-be-written history of TOFC-COFC—but it wasn't. Substantial gains were made in '66, and Cowling, in company with Missouri Pacific's C. P. Dirckx, outlines them this way:

—Addition of cranes and other specialized mechanical equipment for handling trailers and containers on and off rail cars.

—Addition of more specialized trailer equipment to piggyback fleets.

—Addition of more all-piggyback trains, operating on accelerated schedules.

—Substantial expansion of terminal facilities.

—Inauguration of centralized trailer-control systems by a number of roads.

—Improvement of communications within and between railroads on piggyback operations.

—Expansion of intermodal operations, involving rail and water and highway carriers.

Cowling and Dirckx, appearing as a sort of Huntley-Brinkley duo before a shippers advisory board earlier this year, did their own survey of NRPA members before going on—and they came up with a solid set of figures to back up their own theories. Of the roads surveyed, 84% indicated an intention to acquire additional trailer and/or container equipment in 1967; 66% predicted TOFC/COFC traffic increases in '67 of 15% or more; 84% expressed a belief that the business will continue to grow at its present level of annual increase for five or 10 years before there's any leveling-off.

● **Cheers for TTX.** Both men heaped praise on Trailer Train for its role in the growth of piggyback—for its current moves toward development of an all-purpose trailer/container car, and for its commissioning of studies in the loading/unloading field.

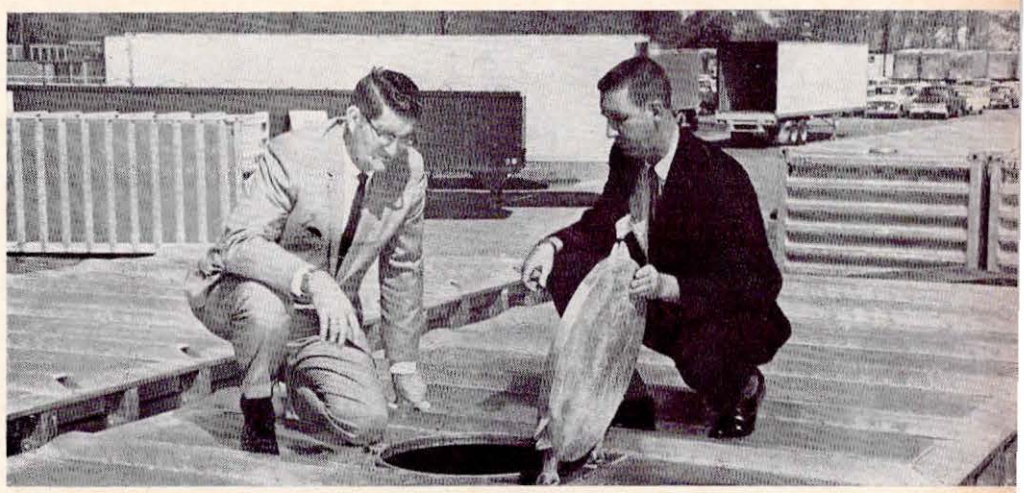
As Cowling put it, "in every industry, there must be times when management reviews the past, tries to project the future and realigns its operation based on its forecast. We are today at the point where all of us must re-evaluate our positions."

Railroads, however, aren't the only people evaluating and re-evaluating. The motor carriers and the water carriers are doing the same thing. Their apparent positions now seem to point to significant gains in intermodal transportation. But they also hold out certain warnings which, they say, have to be kept in mind.

C. G. Zwingle, president of P-I-E and chairman of American Trucking Associations, told NRPA recently that "piggyback represents, if it's properly used, a commendable effort to capture in combination some of the best features of two modes. At the same time, it inevitably has some of the limitations of each."

● **TOFC and the trucker.** Zwingle put out four points for consideration:

—There's an ultimate number of flat cars which can be assembled, loaded, hauled and unloaded without invoca-



THESE BOXES CAN GO ANYWHERE

It resembles a covered hopper car without the running gear—but it's actually an all-welded aluminum container, built for Union Carbide by Trailmobile for bulk-material handling. More than 900 of the 8x8x30-foot units have been placed in service for polyethelene pellet and vinyl powder traffic. Containers are top-loading and have end-ports for gravity-discharge unloading. And there's hardly anywhere the boxes can't go: They're suited for rail, truck, barge or ship handling; they can be handled by crane or straddle-carrier at origin and destination points; they're stackable; and they can be unloaded in a tilt-cradle at a 60-degree angle.

The decision will be based on profitability

tion of the law of diminishing returns, and "if you attempt more, you sacrifice something."

—There are certain extremes beyond which trucking companies cannot go to meet fixed loading times and other determinants in rail-yard operations.

—Advances may come along in highway operations to outpace advances in rail operations and equipment.

—Shifts in costs may at one point or another increase or reduce the attractiveness of piggyback.

As P-I-E-'s president put it, "for the motor carrier, piggyback will always be a secondary operation. He's going to continue to operate over the road, with his trailer dimensions and the number of units being hauled by a single tractor fixed by public policies. What you do with flat cars, if you want his trailers to move on your line, will have to be the best possible accommodation you can devise for his highway equipment. And your charges for multiple trailers will have to reflect favorably in comparison with what he can do over the road. Trucking competition won't stand still on new highway freight techniques. It will move ahead as highways continue to improve and as regulations on highway use are liberalized to keep pace with road capabilities."

● **COFC and the water carrier.** Thoughtful comment has also come from the water carriers—and it holds out a somewhat greater hope for containerization development than that oft-quoted remark: "Containerization has a great future, and it always will."

W. J. Keely, general manager of Container Marine Lines, a division of American Export Isbrandtsen, calls for mutual understanding of problems—and he puts the case this way:

"Steamship lines recognize that it's uneconomical to transport a 20-foot container via piggyback except in the case of a very-high density cargo. To overcome this difficulty, most lines will now marry their standard 20-foot containers into an intergrated 40-foot rig. Why wouldn't it be a better solution to move immediately to the use of standard 40-foot containers? Because the steamship lines are constrained by the requirements of the overseas customer. For international trade, 20-foot containers are needed. In the United Kingdom, a waiver is required for anything in excess of this size. In northern Europe, the 20-footer is better adapted to the rail systems as they now exist and, in some cases, to the volume and type of trade. In other areas where we expect container traffic to grow—notably in Japan, portions of the Mediterranean and especially the Levant—we are limited, to all practical purposes, to the 20-foot configuration.

"For the time being, we must continue to think in international terms. Very often, we must accept the best compromise, unless the entire concept of containerization is to be allowed to founder under the weight of conflicting regulations and the failure to understand this point."

● **Changes coming up.** Keely, however, thinks the restrictions may be only temporary: "I anticipate that most major steamship lines will convert gradually to the 40-foot container as it becomes more generally acceptable and workable overseas."

Size is only one problem

Container size is one problem. But there are others, equally puzzling. CML's general manager notes that "another major point of contention is the imbalance of traffic which now exists between empty and loaded containers, eastbound and westbound. We are aware that the eastern railroads have discussed an empty-container charge as compensation for the haulage of deadhead containers. In my opinion, nothing would stalemate the orderly development of container traffic more than such a charge, for the present time. I sincerely hope the railroads will continue to defer such thinking for at least a year or so, until containers are positioned and we achieve a better volume and a better balance in this traffic."

The wait for improved conditions may not be long, as Keely sees it: "The first ship operator to institute trans-Atlantic service with a full cellular container ship just last year has already reported a trade balance eastbound and westbound. Our limited experience at Container Marine Lines bears out this conclusion."

● **COFC or TOFC?** CML's top operating officer is an unabashed backer of COFC over TOFC—as he explained, not long ago, to the TOFC-oriented members of NRPA: "It's our belief that in the long run, the COFC system will prevail. All European railroads are adopting this system. It requires less investment, since it makes use of simpler rail cars. And, with the container-on-flat-car system, it should be possible to develop more sources of containerized traffic.

"In any event, it would be shortsighted to ignore the potential here. With more sources of traffic and a higher volume, you will achieve better utilization. This, coupled with a lower investment, will make for lower unit costs. And with the advent of rail cars capable of double-decking containers, these unit costs will be lower still, and the cost of carriage by rail could be significantly reduced.

"If the railroads were to provide the lifting equipment required for COFC operations at inland points, I'm quite certain that most ship operators would provide—as CML already has—matching equipment at the port end.

"The railroads themselves will surely agree that trailers on flat cars have a major economic advantage over box cars. The evolution of containers on flat cars represented still another forward step, and the forthcoming development of stacked containers on flat cars brings you near to the optimum in efficiency."

Whatever happens in the trailer/container debate, however, the decision—for all concerned—will be made on a basis of profitability. As Trailer Train President J. P. Newell has said, commenting on another phase of the debate, "a basic question is how much net income is provided by the various types of TOFC and COFC operation. Even the answers to this question can be confusing. For example, the effort to make a possible smaller net income on Plan I traffic than is possible with Plan II traffic should not be discounted if Plan I traffic is a net gain and is not procured by robbing potential Plan II traffic. I think we all realize this discussion can be carried on ad infinitum, and simple statements comparing various types of traffic can be very misleading."

The head man of TTX is also much concerned with development of more accurate forecasting of car needs. As it happens, the Trailer Train fleet has been growing at a faster rate than piggyback has—if piggyback is measured only in terms of loadings. Yet there are car shortages. The apparent reasons have been that both interline traffic and length-of-haul have been increasing. TTX car utilization remains high—but optimum results may come only when increases can be predicted in terms of piggyback car-miles.

● **Why optimism?** The future holds that—better forecasting to make possible better use of available equipment. And, according to piggyback operating and traffic managers, it also holds

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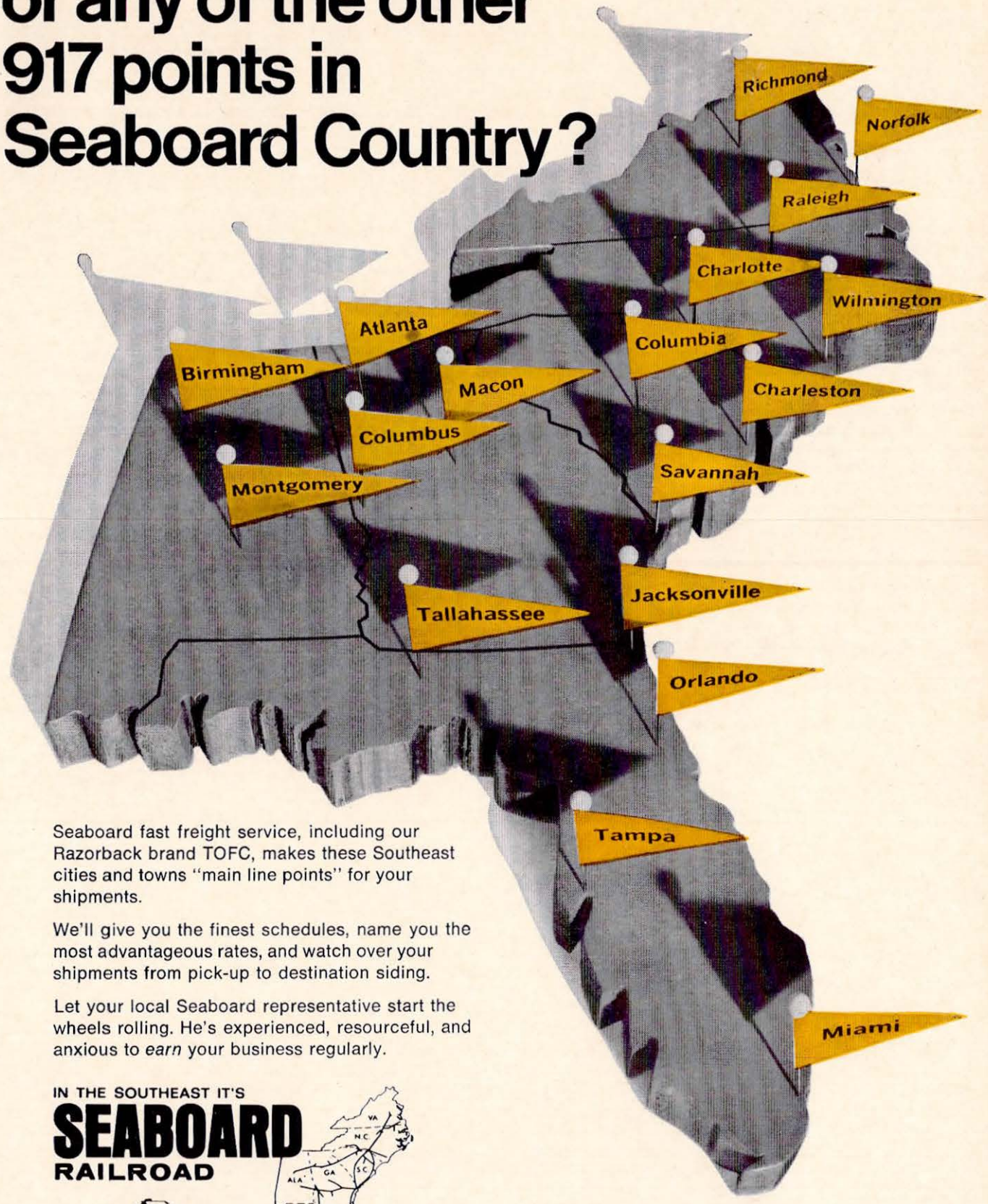

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Equipment changes may be the next big step

promise of improvement in a number of other areas. TOFC/COFC people can cite a wide range of reasons for their glowing assessment of the traffic and revenue potential.

Fifteen separate factors were cited by TOFC/COFC men participating in the Railway Age survey—and the breakdown shows, perhaps, a few surprises. Predictably, the elements of shipper satisfaction—with reliability, dependability and flexibility of service and with lower transport charges—ranked highest. But increased intermodal cooperation got votes from close to half the participants, and the build-up of import-export container traffic got more votes than might have been expected at this point. Improvement in both TOFC/COFC equipment and handling facilities drew heavy support—but comparatively few railroad men cited higher motor-carrier costs as a significant factor in piggyback growth, and their votes were almost offset by those traffic officers who remain wary of a competitive reaction from the truckers, either on their own or with legislative help.

• **One big danger?** And if there was one big surprise in the survey, it was the flatly-stated fear on the part of several piggyback managers that railroads themselves might contribute to a deflating of the boom—through apathy, complacency and a plain failure to recognize and exploit the potential of the operation as a profit-maker (see Viewpoint, p. 98).

Then, too, there are a few old TOFC/COFC questions still unresolved—and a few new ones which seem to be developing.

Over the past few years, there's been much tinkering with the five basic piggyback plans, particularly in the area of Plans II and III. Whatever the relationship of cause and effect, the figures today indicate that the bulk of piggyback's growth is right there—while Plans I, IV and V seem to be holding fairly steady. Or, putting it another way, in periods of less-than-dynamic growth for TOFC and for rail business generally, Plans II and III appear to be most resistant to a slump.

A second situation that many piggyback operators are watching closely is the shifting pattern of traffic and equipment-use as reflected in comparisons of carloadings and trailers-handled figures. Statisticians had become used to seeing the trailers-handled total increase at a higher rate than the loadings total. Now, a reverse situation has set in. Over the first four months of 1967, piggyback carloadings showed a 5.9% increase from '66 levels—but the number of trailers handled climbed by only 5.1%. Some observers wonder if operating efficiency is slipping. Others think the switch in growth rates can be laid to slippage in general business conditions. Still others, noting the steady expansion of the points-served list, believe that the opening of ramps in smaller communities with less immediate traffic volume necessarily means that railroads will be hauling more one-trailer cars—the so-called half-carloads—until more business can be generated.

• **A question of hardware.** A third factor, and a big one among those who ponder piggyback, is the equipment situation, and that includes both the cars and trailer/container equipment and the ground-support facilities.

It's in this area that some of the biggest changes may be coming—and with a little bit of luck, these improvements may be available to the industry in time to precede the big demand, not follow it.

The all-purpose flat car

This would be true especially in the car-equipment field. With a few exceptions, there is no great demand today for container-handling equipment or for a car capable of doing an economical and efficient job of hauling both wheeled and wheelless vehicles. But tomorrow may be another story—and that's why Trailer Train put its look-ahead philosophy to work last year in calling on its four major suppliers to develop an all-purpose flat car.

Three of the designs—from General American, ACF and Pullman-Standard—have been under road test; the fourth—from Bethlehem Steel—is yet to come. Testing and evaluating the four units will take time. But decisions will likely be made without delay, once the over-all test program is completed. And there are tentative plans for a presentation on the results to be made to NRPA by its car equipment committee next autumn.

• **Torment in the terminal.** Actually, the area where there's probably going to be the most debate—and, some fear, the slowest progress—is that area concerned with terminal operations. P-I-E's Cal Zwingle warns of the law of diminishing returns—and railroads with booming big-city terminals know what he means.

Installation of lifting devices at major terminals has gone a long way toward relieving congestion, for now. But there's a strong feeling in some quarters—as expressed in detail by such men as F. S. Macomber, vice president-director of A. T. Kearney & Co.—that continued growth will justify installation of highly-sophisticated, automated container transfer systems.

Macomber, like CML's Keely, also leans strongly toward containerization as the wave of the future—and Kearney, in fact, is moving ahead with investigations following up on a pilot study which pointed to attractive possibilities in the use of unit container trains for movement of grocery products. Total annual cost of distribution of all grocery-store products, the consultants note, is estimated at $11 billion—and the preliminary look at unit-container operations shows a potential for (a) substantial reductions in distribution expense, at the same time that (b) carrier profits are improved.

This is the kind of work that's going on in some quarters today—and the kind that most observers think will have to be done in depth and detail and soon on a broad-scale, if the TOFC/COFC momentum is to be long-term maintained.

• **Projections: Another look.** With this in mind, then, are the predictions of 2.6 million carloads and 4.6 million units-handled and $1.1 billion in revenues by 1972 really to be taken seriously? Probably they are. Or, to qualify it one way, they would seem theoretically attainable—given continued expansion of the economy, the expected improvements in equipment and facilities and a not-at-all paradoxical aggressiveness by railroads in furthering both competition and intermodal cooperation.

Other projections have also been made, on a more individual basis than those made by the Milwaukee's Cowling. Take, for instance, REALCO's forecast on fleet needs. The REA subsidiary and Xtra, ranking 1-2 among trailer lessors, now have upwards of 20,000 units in service. By June 30 of this year, says REALCO Vice-President and General Manager Palmer Bayer, his outfit can count on having exactly 11,769 trailers available. By June 30, 1972, the fleet will be at least double in size. And if you split the difference between Bayer's low and high projections, you come up with a figure of about 35,000 trailers which this company alone will have rolling around the country. ■

What's going for TOFC, or against it?

The future looks bright, if rates, facilities and service are right.

Ever since its inception, something more than a decade ago, railroad piggyback service has grown steadily. This year, to date, it has continued to grow—at a somewhat slower pace, but in the face of a drop in rail carloadings as a whole. (Through May 13, carloadings were down 2.98% from the corresponding period in 1966; through May 6, piggyback loadings, on the same basis, were up 4.77%.)

The contrasting figures make this a good time to take stock: Just what does the foreseeable future hold for TOFC?

What factors are favorable to its continued growth? What are unfavorable? What, if anything, can be done to overcome the latter, if they exist?

Shippers queried in this month's Poll see both favorable and unfavorable factors over the next five years. What they say as to those matters which are under railroad control is collectively summarized in the box at the right. They also see some factors which are not directly under rail control. On the favorable side, likely to stimulate TOFC traffic, they list increases in truck costs and rates; mounting highway congestion, with its resulting delays; a "general trend toward use of containerized freight"; and growth of shipper cooperative associations, which are often large users of piggyback service. On the unfavorable side, they see as capable of hurting piggyback resort to private carriage; possibilities of higher taxation or of labor interference with TOFC operations; and danger of "apathy" on the part of rail management, arising from the belief that "all lost tonnage has been regained."

- **Remedies.** More important, however, than what they see is what they suggest to overcome unfavorable factors.

"Service failures have already developed, but renewed efforts on the rails' part can retain or strengthen their gains," says R.P. Clinton, traffic manager, Honeywell, Inc., Minneapolis. T. H. Jones, general transportation manager, Diamond Alkali Co., Cleveland, thinks there must be "continued effort to improve operations."

That effort, his colleagues say, must be on the road or in terminals—or both. J. L. McFadden, corporate traffic manager, R. R. Donnelley & Sons Co., Chicago, suggests "fast scheduling of TOFC trains." "Set operating schedules and maintain them," says W. A. Wilkinson, TM, Vick Manufacturing Division, Richardson-Merrill, Inc., Philadelphia. F. J. Fruechtemeyer, TM, Andrew Jergens Co., Cincinnati, calls for "organization of more through trains with faster schedules, plus aggressive action on the part of all rail personnel, including operating and terminal employees, to assure that shipments are moved in accordance with published schedules."

M. P. Dion, TM, Standard Household Products Corp., Holyoke, Mass., thinks service depends on "more efficient handling at the receiving yard, and possibly increasing the number of cartage agents." He explains his views by saying:

"We have found that line-haul service may equal over-the-road motor service, or perhaps lag by one day. More time is lost at the [TOFC] re-

(Continued on page 40)

1) What do you see as the biggest factor (or factors) which may lead to continued growth of piggyback over say, the next five years?

SERVICE which will be flexible, versatile, fast, dependable, damage-free, and competitive with that provided by highway carriers.

RATES which will be at the lowest possible level, "realistic" in relation to railway costs, and competitive with those of trucks.

EQUIPMENT—trailers, cars and terminals—in adequate quantity, and tailored to shippers' needs.

ELIMINATION OF "ARTIFICIAL" RESTRICTIONS, especially the 60/40 mixing rule.

(Additional favorable factors, largely, however, beyond direct railway control, are mentioned in the following text.)

2) What major factor (or factors), if any, might tend to limit growth of piggyback over the next five years?

SERVICE DEFICIENCIES, especially failure to maintain schedules.

RATES, if they are too high in relation to truck or box car rates, too inflexible, or not competitive.

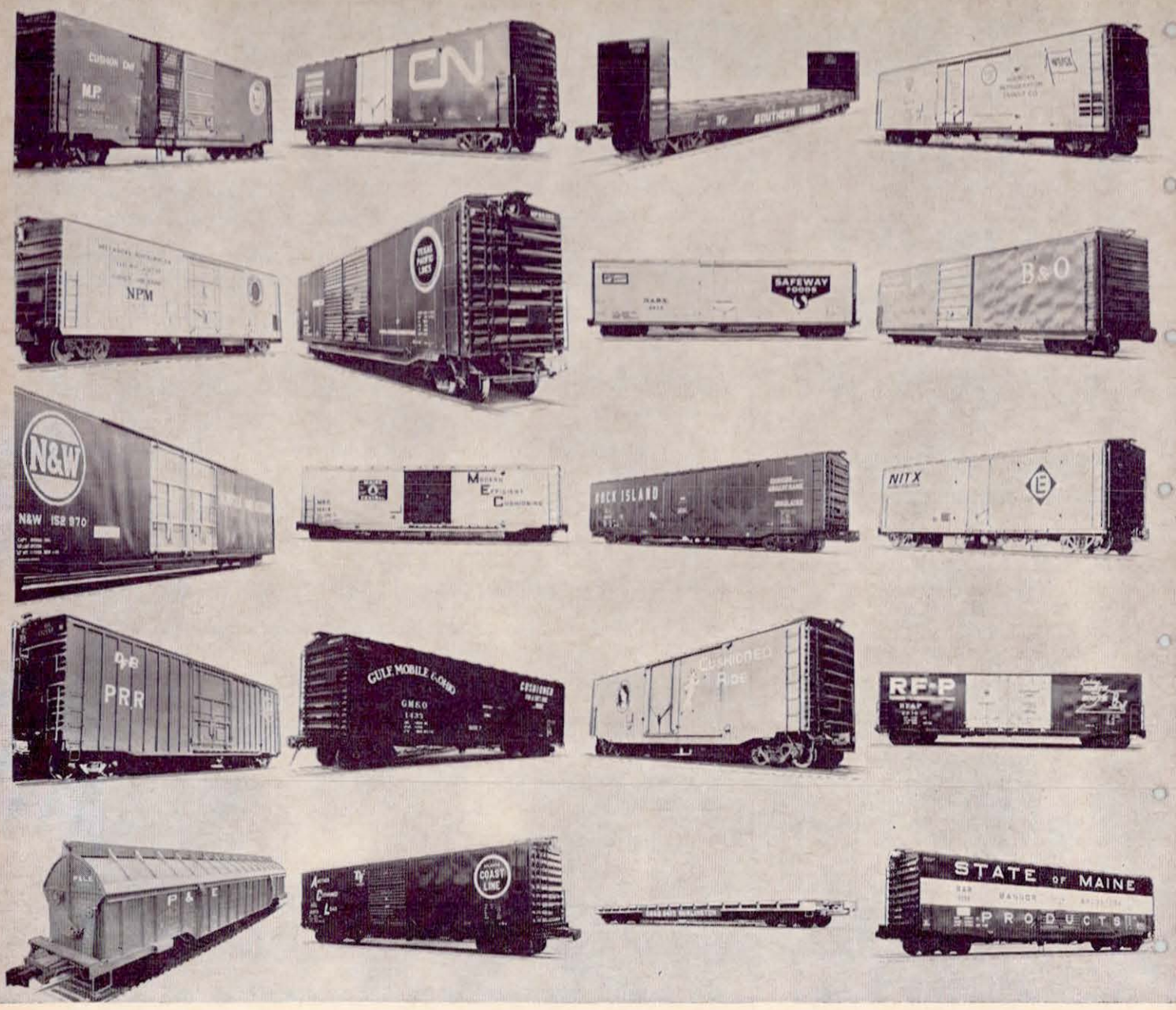
EQUIPMENT, if it is inadequate in quantity.

"ARTIFICIAL" RESTRICTIONS, notably the 60/40 rule.

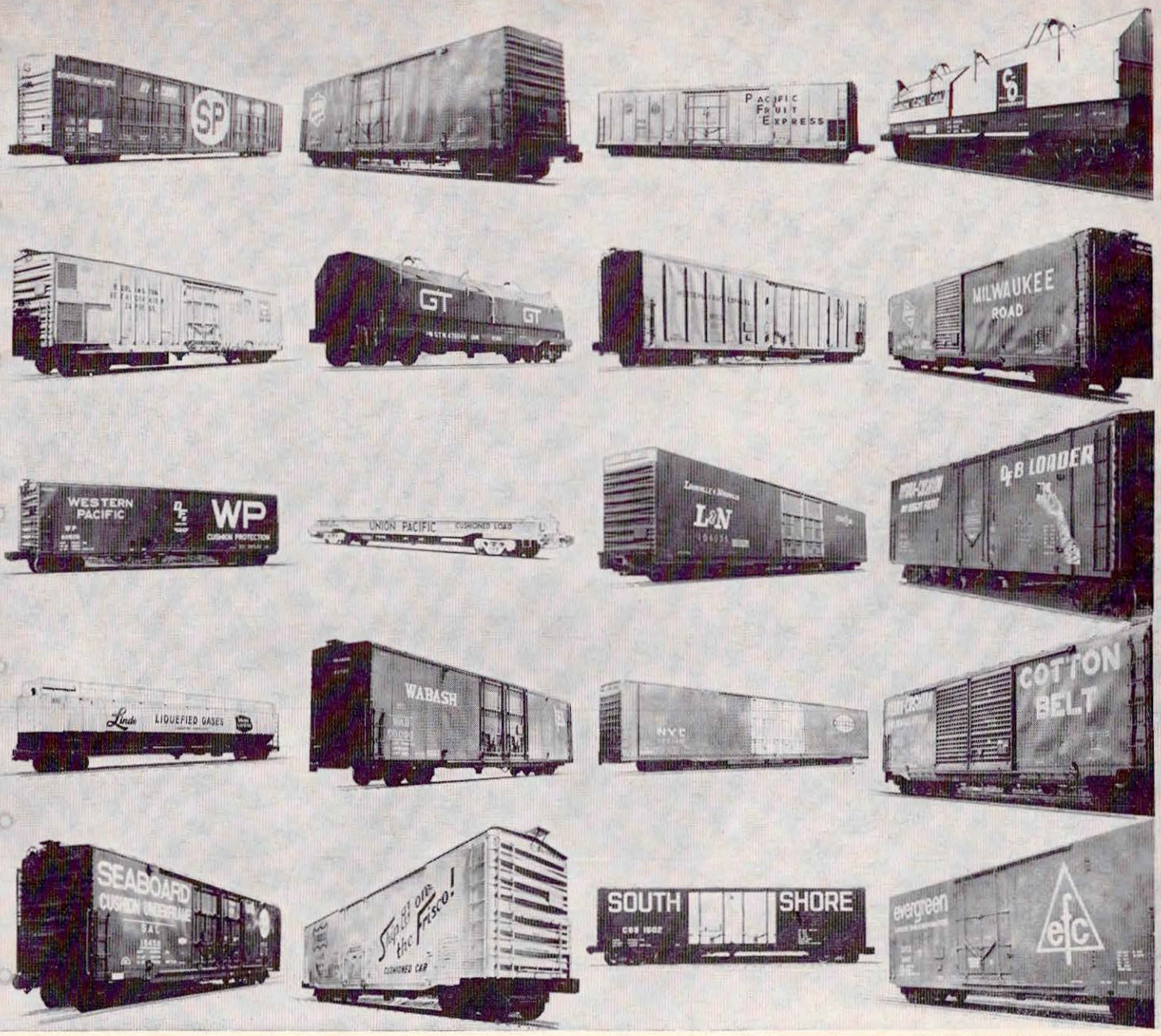
3) If any such limiting factors exist, how do you think they might be overcome?

See following text.

[Because of the nature of the questions, replies to this particular Poll were not subject to precise mathematical tabulation. Answers to both Questions 1 and 2 faithfully reflect, however, the importance which shippers attach to the factors listed. In each case, "service" and "rates" ran virtually neck-and-neck, with the other factors mentioned less frequently but in the order indicated.]



We may not know much about art, but these



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TOFC should lead to coordinated service

(Continued from page 37)
ceiving yard than at the motor carrier terminal, due no doubt to the large number of trailers arriving at one time. If this delay can be reduced railroads will have an edge over motor carriers. Cartage agents must be apprised of their obligation to effect fast, efficient deliveries."

"Too much lost time in terminals" keeps piggyback from being fully competitive with truck service, at least on shorter hauls, in the opinion of C. D. Baillie, assistant manager, distribution service, C&H Sugar, San Francisco. "Better terminal facilities," as well as more all-piggyback trains, are called for by K. A. Kumm, TM, Rates and Research, 3M Co., St. Paul.

"Inability of railroads to expand TOFC yard operations to cope with increased growth can lead to poor service, congestion, and higher costs," in the opinion of J. R. Abbey, manager, Charter Oak Shippers Cooperative Association, Fairfield, Conn. The remedy, he feels, may lie in moving piggyback facilities out of large urban areas where land costs [for expansion] are high to points where costs would be lower, but which could be quickly reached via express highways.

Charles M. Donley, of Pittsburgh, owner of Charles Donley & Associates, calls for "better control over movements to and from freight cars." Such control could perhaps be facilitated by the "automatic equipment" which R. G. Scearce, secretary, Hood River Traffic Association, Hood River, Ore., thinks "should make it reasonably simple to maintain schedules once they are established."

• **Rates.** Some comments in this area are limited to calls for "realistic rate negotiation" (F. J. West, TM, Drackett Co., Cincinnati, or "intelligent negotiation" (J. S. Traunig, manager, transportation and export, Ensign-Bickford Co., Simsbury, Conn.).

"Realistic rates related to consistent service" are the suggestion of R. J. Tyler, TM, Chemetron Corp., Louisville, who continues: "Apply the principle of Section 15A rate-making without regard to competition, and maintain good service.

"Everything that moves over the highway for 300 miles and more," Tyler adds, "can move in or on trailers on flat cars. Rates and service will determine the routing. With the tremendous cost factor in favor of piggyback, the railroads have a golden opportunity to capture most of the business if rates are reasonable and service is adequate."

• **Cost of service.** "Rail carriers must divorce TOFC rate-making from motor carrier rates, and go instead to a cost-of-service formula, to provide shippers with an incentive to switch tonnage from truck to TOFC," says L. B. Harmon, director of traffic, Kaiser Aluminum & Chemical Corp., Oakland, Cal.

Somewhat the same general opinion is expressed by Frank Becht, GTM, Falstaff Brewing Corp., St. Louis. "TOFC rates must be established to meet proprietary trucking costs, when economically possible. Carriers must have a more consistent, uniform and reasonable determination of TOFC out-of-pocket costs in order to establish remunerative rates which will, in fact, move traffic."

"Re-evaluate"

"Re-evaluation of existing costs vs. rates" is advocated also by J. A. Illes, director of transportation, Outboard Marine Corp., Waukegan, Ill. He adds, however, that this must be "realistic, not hypothetical, with rate differentials adjusted accordingly to attract and retain cargo as volume carriers."

Another viewpoint is expressed by J. L. Bergen, TM, Uncle Ben's, Houston: "Piggyback rates, as a rule, are higher than rail rates. The relative degree of increased cost will be the barrier which can limit growth.

"I believe carrier rate committees should take a more realistic view of shippers' rate proposals, and not be too prone to consider the gross revenue required to make a given haul profitable. What experience I have had with progressing piggyback rates leads me to believe the carriers have set certain minimum requirements in dollars per trailer for a given distance, and are not considering what the traffic will bear in comparison to rail rates.

"If the same attitude . . . were used as a yardstick for rail rate proposals, many commodities would not be moving at the low rates they now enjoy. As technological innovations reduce the cost per trailer, and cut the cost of handling, piggyback rates should more approach the level of rail rates for the same commodity."

Some beginning toward such an approach might perhaps be achieved by Wilkinson's suggestion of volume incentive rates for piggyback; or by "higher maximum loads for two trailers on one car, at rates more nearly equal to carload rates," as proposed by W. L. Reid, director—traffic, CF&I Steel Corp., Denver.

• **Equipment.** More TOFC equipment, and better distribution of it, are recommended by a number of Poll respondents. C. A. Hoppe, GTM, S. C. Johnson & Son, Racine, Wis., calls simply for "more." So does G. J. Mason, director of transportation and distribution, Wyandotte Chemical Corp., Wyandotte, Mich., who suggests that "railroads strive to add equipment as promptly as possible."

H. P. Gabriel, GTM, Hershey Chocolate Corp., Hershey, Pa., points out that "poor service, rough handling, inferior equipment and higher rates may all be limiting factors in future growth of TOFC. Most important, however, is the need for the right type of equipment in the right place at the right time. Inability to supply equipment can be the most detrimental handicap to growth."

Almost identical language is used by G. W. Albertson, GTM, F. W. Woolworth Co., New York, who calls for "sensible planning and careful study of the balance between box car and piggyback operations. Railroads must have their piggyback equipment at the right time and the right place. They should be wary not to duplicate their box car dilemma through faulty distribution of TOFC equipment."

Harmon, quoted above, thinks "railways should look to TOFC as at least a partial solution to the box car shortage, instead of permitting fear of diversion of box car traffic to affect TOFC rate-making.

"Where traffic balance or special equipment supply is a problem," he adds, "carriers should institute free return provisions or mileage or per diem allowances to encourage use of shipper equipment." Some Southwestern and WTL carriers, he notes, "have already adopted this approach."

"Equipment," some respondents point out, is not wholly a matter of cars or trailers; it extends also to piggyback terminals. Mason, for one, suggests "new ramp facilities throughout the country."

• **Down with 60/40!** The feeling that many piggyback rates and rules are unduly restrictive crops up in many replies, including a number of those already quoted.

Big bugaboo, not surprisingly in view of known shipper opposition to it, is the 60/40 mixing rule. "Eliminate it,

or publish single article listings," admonishes B. J. Riggs, GTM, Behr-Manning Division, Norton Co., Troy, N.Y.

And Freuchtemeyer too asks for "modernized thinking about pricing to provide attractive rates to all shippers with a minimum of restrictive rules, such as the present mixing rules in connection with Plan III movements."

● **Terminal problems.** Other respondents, like Dion, suggest that terminal congestion and delays can be a limiting factor in piggyback's growth, and must be overcome.

Typical of replies along that line is that of C. H. Richardson, TM, Nicholson File Co., Providence, R.I., who speaks of "congestion at terminals and failure to develop cartage agents, and to treat them as equal agents."

● **Coordinated service.** Whatever faults piggyback may have, many shippers make it perfectly clear that they "like it," as W. C. Mahr, director of distribution, Oakite Products, Berkeley Heights, N.J., puts it.

But that future might be brighter, others think, if service between rail lines, and between them and other modes of transport, were better coordinated.

"Carriers must take steps to develop coordinated service," says W. E. Harvey, general transportation manager, Swift & Co., Chicago. "Too many feel once the shipment leaves their line the movement is complete. Schedules must be coordinated from origin to customer's dock."

Lee Cisneros, manager, physical distribution, Cabot Corp., Boston, and R. L. Kendall, GTM, Inland Container Corp., Indianapolis, carry the idea a step farther. Cisneros calls for "greater awareness of the problem on the part of all carriers, recognition of need for some compromise in systems, and willingness to cooperate intermodally." Kendall sees a need for "extending and enlarging the total distribution concept, to enable railroads to handle all phases of transportation, origin to destination."

TOFC, says P. J. Wellnitz, distribution manager, Western region, Union Carbide Corp., "has a fantastic potential." But to realize that potential, he feels it must be made more flexible between all modes of transport on flexible through rates, and less restrictive as to commodities. In short, "it must be used as a new distribution tool."

It probably boils down to the prescription given by H. N. Johnson, vice president—traffic, Ralston Purina Co., St. Louis: "Provide equipment, facilities, and the particular plan to fit shippers' needs at rates competitive with other forms of transportation." ■

LUTHER MILLER

AS THE EDITOR SEES IT...

WE COULDN'T WAIT, MR. DAVIS — David E. Davis, Jr., writing in a publication called "Car and Driver," tells of a harrowing trip he took on a train. It was all so inefficient and nerve-racking that Mr. Davis was led to exclaim, "The next time some pompous jerk corners me and starts complaining that the automobile is an obsolete and inefficient solution to the problem of mass transportation, I will hit him right in the mouth."

Mr. Davis has his own axle to grind, being on an automotive paper's payroll, and we do not begrudge him his tirade. What does bother us is the fact that this particular article was called to our attention by a railroad industrial engineer who says that "while Mr. Davis is admittedly prejudiced, his observations parallel my own."

Agreeing (with Mr. Davis and the industrial engineer) that railroad passenger service isn't what it used to be, we think the next question ought to be, "Why?" The "Car and Driver" columnist answers this pretty honestly, if unwittingly.

He starts off by saying that he makes a round trip between Detroit and New York about 30 times a year—"flying a couple of times each month, and driving it six or seven times in the course of a year." Finally, he "decided to take the train instead."

And what did he find? "There was one ticket window open in the entire cavernous tomb that is Detroit's Michigan Central Depot. . . ."

Well, what in the world did he expect—a welcoming committee, waiting for him to make his once-in-a-lifetime trip by train?

SO WHO'S SURPRISED?—The sad fact is, there are just too many Mr. Davises. They fly and drive around the land, and when whim or blizzard drives them to the railroad, they're shocked to find that service has deteriorated. We aren't.

All of this is very much to the point right now, in view of current efforts to make it tougher for railroads to take off those trains that can no longer pay their way, or even come close to it.

Railroad men, of all people, have to go beyond the "What?" of the passenger-train situation, and get to the "Why?" of it. Only then can we get to the all-important question: "How can we do something about it?" We may find the answer in the Northeast Corridor experiment. We certainly aren't going to find it at the wailing wall.

THE DIESEL HAS ITS DAY—Whoever would have thought, just a few years ago, that we would one day see a "Diesel Spotter's Guide"? Well, we've seen one now. It's by Jerry Pinkepank, it's published by Kalmbach Publishing Co. (1027 North Seventh St., Milwaukee 53233), and at $3.50 it costs just slightly more than a penny a page. For amateur or expert, we can't think of a better buy.

As Mr. Pinkepank points out in his preface: "Diesel locomotives of standardized design ('models') have been in production in the United States since the Alco-GE-IR consortium of 1925-1928 offered a standard line of 60-ton and 100-ton boxcab switchers. . . . Yet in all this period there has never been a really comprehensive catalog of American diesel practice. This is the void this book will try to fill."

"Diesel Spotter's Guide" fills that void admirably.

THE INSCRUTABLE ORIENT—Our London office, which keeps in close touch with the railway market around the world, reports the following equipment wanted notice received from a Far Eastern railroad:

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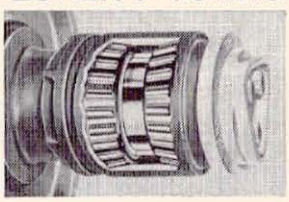

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DEPENDABILITY

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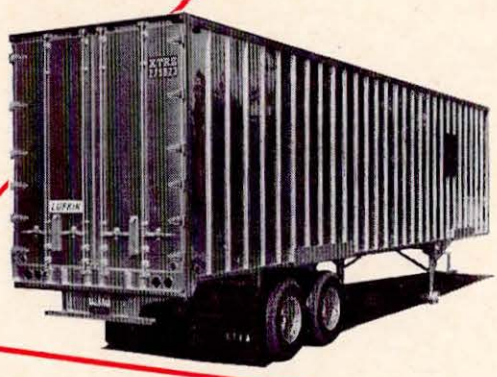

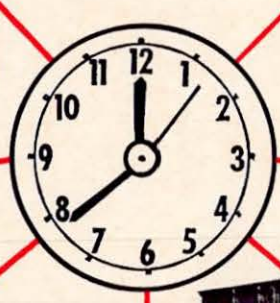

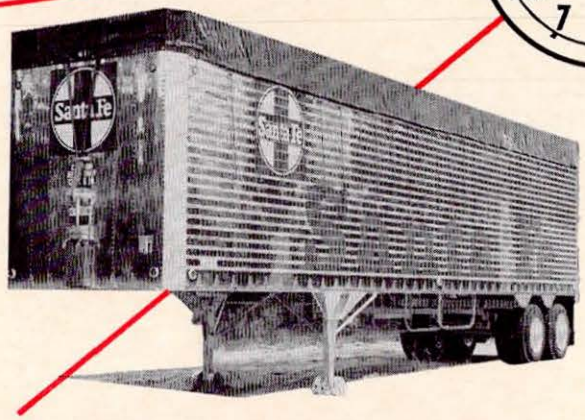

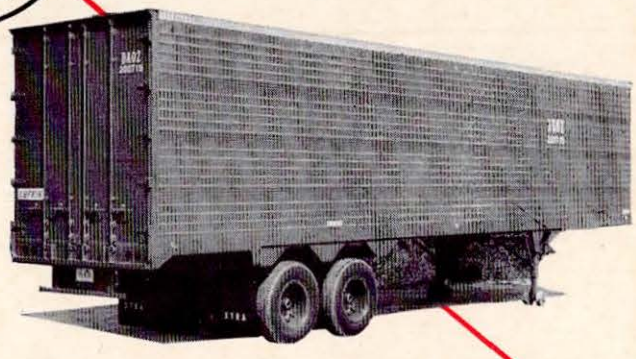

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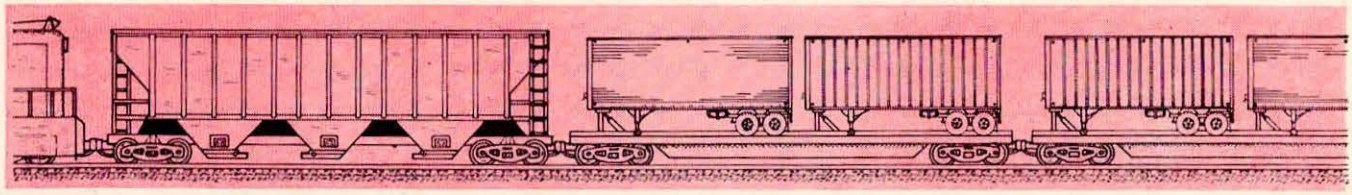

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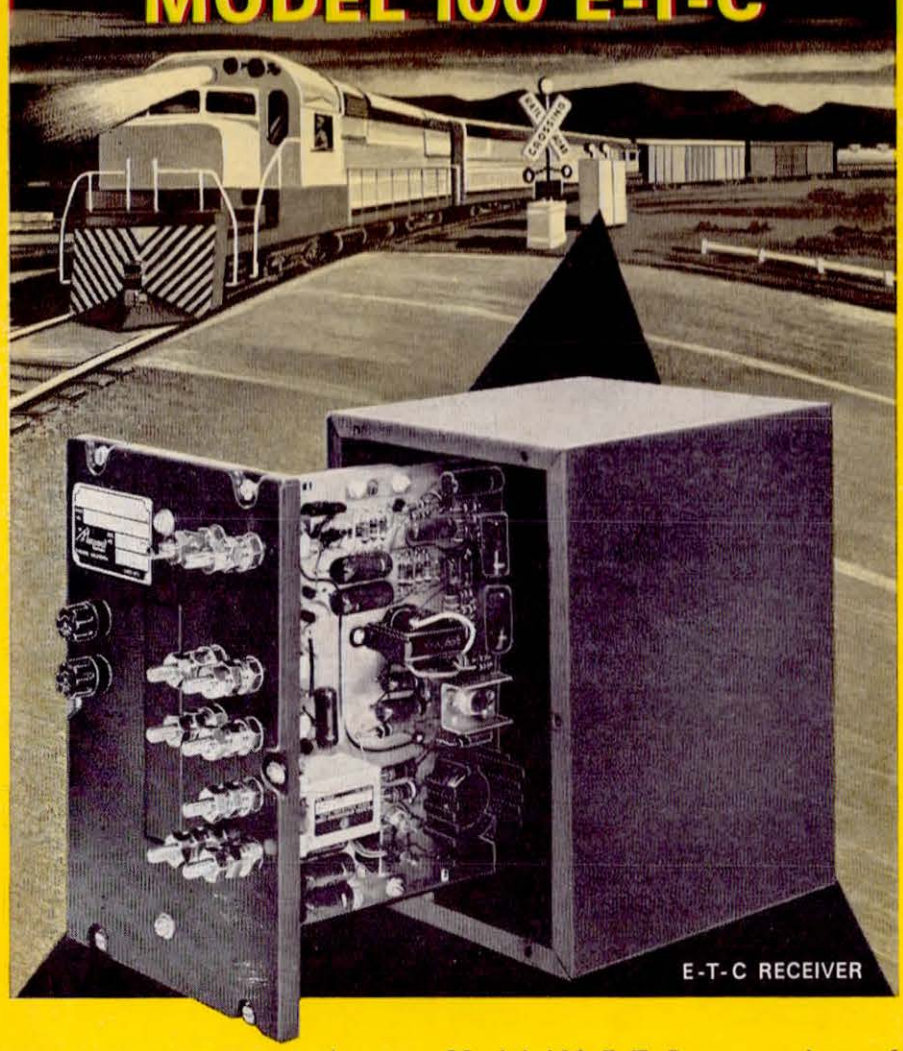

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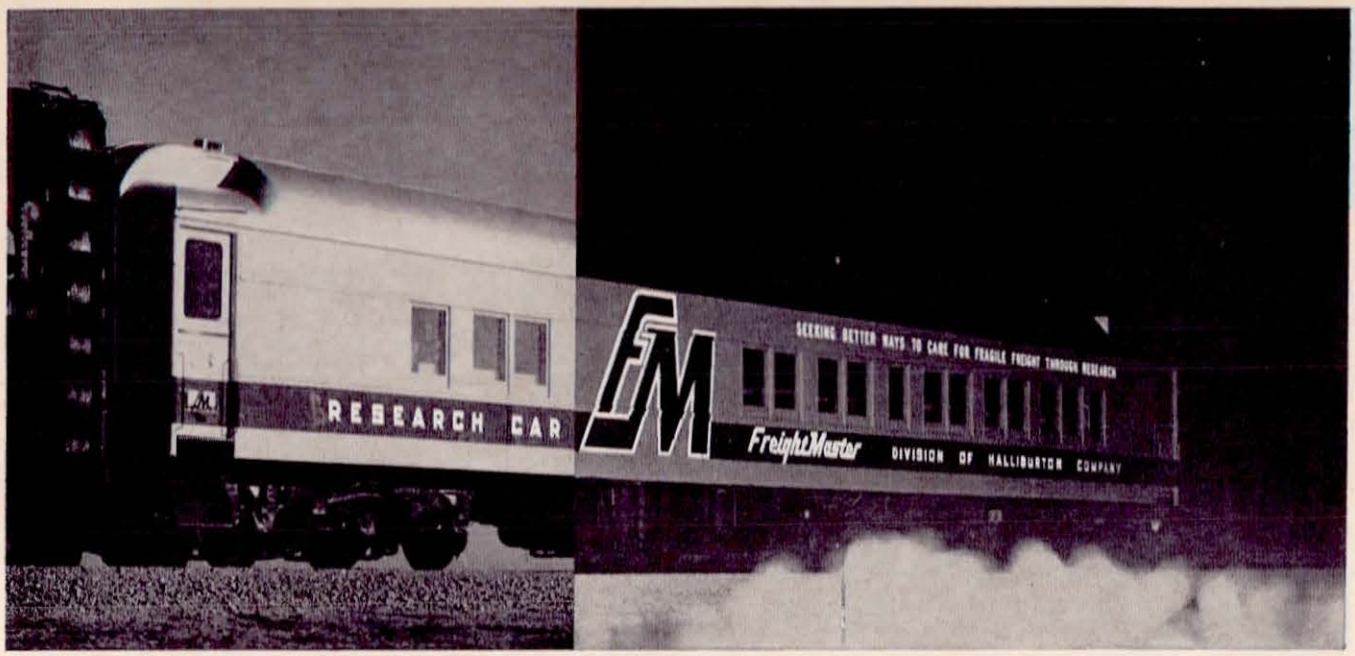
First Quarter Figures of Calendar Year 1967

Name of Road	Average mileage operated during period	Operating Revenues: Freight	Pass.	Total (inc. misc.) 1967	Total (inc. misc.) 1966	Operating Expenses: Maint. Way and Structures: Total 1967	Total 1966	Deprec. and Retirements	Maint. Equipment: Total 1967	Total 1966	Deprec. and Retirements	Traffic	Transportation	Total 1967	Total 1966	Operating ratio 1967	Operating ratio 1966	Net from railway operation	Railway tax accruals	Net Railway operating income 1967	Net Railway operating income 1966
Akron, Canton & Youngstown....3 mos.	171	1,622	....	1,683	1,704	208	219	19	329	318	147	122	633	1,399	1,364	83.1	80.0	284	97	269	180
Ann Arbor....3 mos.	293	1,989	....	2,020	2,436	207	226	22	415	448	144	55	1,056	1,794	2,027	88.8	83.2	225	165	—92	—19
Atchison, Topeka & Santa Fe....3 mos.	12,921	138,095	6,583	160,126	163,116	22,632	19,762	2,507	36,406	35,129	11,230	4,828	63,202	134,808	127,349	84.2	78.1	25,318	14,678	9,791	17,117
Atlantic Coast Line....3 mos.	5,741	52,350	4,005	59,911	54,708	7,111	6,315	569	10,612	9,680	3,513	2,229	21,595	44,890	41,653	74.9	76.1	15,021	4,850	6,458	5,553
Baltimore & Ohio....3 mos.	5,748	93,952	1,560	101,630	97,683	10,400	10,339	1,520	17,310	16,167	2,546	2,593	40,073	77,204	74,235	76.0	76.0	24,426	7,302	4,165	5,677
Bangor & Aroostook....3 mos.	544	4,001	51	4,110	4,142	823	927	68	1,205	1,030	475	95	1,288	3,660	3,505	89.0	84.6	450	284	581	670
Bessemer & Lake Erie....3 mos.	201	4,699	....	4,816	5,599	813	959	115	1,332	1,204	—92	170	1,622	4,453	4,367	92.5	78.0	363	813	501	972
Boston & Maine....3 mos.	1,529	13,275	1,088	15,904	15,358	2,041	2,111	394	2,252	2,196	638	342	7,276	12,680	12,529	79.7	81.6	3,224	1,218	528	300
CPR Lines in Maine....3 mos.	234	1,976	61	2,102	2,444	296	275	59	357	436	54	61	577	1,410	1,480	67.1	60.5	692	79	262	511
Central of Georgia....3 mos.	1,749	10,582	295	11,396	12,139	2,293	2,689	199	2,267	2,432	702	486	4,947	10,928	11,430	95.9	94.2	468	152	—473	—372
Central RR of New Jersey....3 mos.	571	9,047	1,112	11,968	13,051	1,503	1,540	346	2,295	2,624	451	354	6,875	11,792	12,162	98.5	93.2	176	1,152	—2,282	—1,653
Central Vermont....3 mos.	382	1,999	—4	2,081	2,000	469	475	54	274	281	23	33	877	1,751	1,857	84.1	92.8	330	181	—76	—345
Chesapeake & Ohio....3 mos.	5,128	88,400	966	93,857	91,921	10,100	10,100	1,462	19,653	18,108	6,276	2,612	38,109	76,509	74,158	81.5	79.8	17,349	8,926	9,988	9,541
Chicago & Eastern Illinois....3 mos.	862	8,735	276	9,575	9,769	1,664	1,205	141	1,878	1,715	558	384	4,042	8,677	7,790	90.6	79.7	897	752	—822	621
Chicago & Illinois Midland....3 mos.	121	1,496	....	1,537	2,012	99	100	21	228	244	36	7	428	961	959	62.5	47.7	576	313	179	378
Chicago & North Western....3 mos.	10,179	49,574	4,989	57,193	54,442	8,496	7,930	1,387	10,294	9,692	3,444	1,914	24,945	48,794	45,283	85.3	83.2	8,399	4,637	—1,983	1,399
Chicago, Burlington & Quincy....3 mos.	8,557	58,103	4,104	68,764	65,519	8,225	7,510	1,117	12,879	12,513	4,194	2,312	28,686	56,437	53,302	82.1	81.4	12,327	5,262	4,146	5,527
Chicago Great Western....3 mos.	1,427	7,257	....	7,530	7,450	965	913	170	1,331	1,409	394	378	2,687	5,667	5,806	75.3	77.9	1,862	627	263	312
Chic., Milw., St. Paul & Pacific....3 mos.	10,510	53,271	2,626	61,952	60,916	7,382	7,504	1,349	9,994	9,374	3,096	1,764	26,821	50,147	48,169	80.9	79.1	11,806	5,515	2,029	5,325
Chicago, Rock Island & Pacific....3 mos.	7,459	50,716	2,241	57,393	56,545	7,750	6,643	1,121	10,225	9,755	2,296	1,707	24,485	47,608	44,917	83.0	79.4	9,785	4,588	—912	2,405
Clinchfield....3 mos.	306	7,388	....	7,439	7,150	807	668	68	1,187	1,048	508	246	1,973	4,454	4,010	59.9	56.1	2,985	686	2,357	2,532
Colorado & Southern....3 mos.	709	3,257	53	3,715	3,802	519	467	35	758	767	302	92	1,622	3,393	3,170	91.3	83.3	322	243	124	331
Ft. Worth & Denver....3 mos.	1,362	4,470	79	5,005	5,709	681	756	112	779	831	153	212	2,190	4,384	4,539	87.6	79.5	621	367	—288	—14
Delaware & Hudson....3 mos.	734	10,057	228	10,662	10,315	1,121	1,105	183	2,560	2,150	615	338	3,879	8,591	7,939	80.6	77.0	2,071	1,169	783	1,240
Denver & Rio Grande Western....3 mos.	2,162	20,793	451	21,760	21,090	2,236	1,932	286	3,578	3,321	1,333	805	7,328	15,325	14,571	70.4	69.1	6,436	3,127	3,322	3,325
Detroit & Toledo Shore Line....3 mos.	50	1,711	....	1,855	1,892	146	159	13	255	259	109	69	646	1,214	1,241	65.4	65.6	641	231	192	199
Detroit, Toledo & Ironton....3 mos.	469	6,103	....	6,544	7,267	499	765	47	1,335	1,372	767	209	2,265	4,623	4,838	70.6	66.6	1,922	482	949	1,332
Duluth, Missabe & Iron Range....3 mos.	11	1,799	....	1,933	1,875	1,054	1,071	172	1,393	1,288	541	50	1,516	4,731	4,691	244.8	250.2	—2,799	Cr.1,100	—1,470	—1,367
Duluth, Winnipeg & Pacific....3 mos.	174	2,072	....	2,100	2,157	232	235	18	143	196	3	38	719	1,183	1,121	56.3	52.0	917	177	405	495
Elgin, Joliet & Eastern....3 mos.	205	8,465	....	12,391	12,621	1,530	1,073	106	2,099	2,265	390	145	4,783	9,561	9,021	77.2	71.5	2,831	1,696	637	1,078
Erie Lackawanna....3 mos.	2,883	45,993	2,501	53,708	55,310	5,606	5,226	1,152	9,805	8,989	2,422	1,287	25,496	45,033	44,109	83.9	79.8	8,676	4,437	210	3,209
Florida East Coast....3 mos.	572	6,549	10	6,681	6,627	1,340	877	—302	1,016	1,292	335	145	2,097	5,003	5,021	74.9	75.8	1,678	844	9	29
Georgia Railroad....3 mos.	331	2,287	19	2,554	2,251	328	309	27	429	419	103	143	980	2,021	1,917	79.1	85.2	533	153	307	154
Grand Trunk Western....3 mos.	946	13,916	388	15,555	16,199	2,043	1,880	209	2,704	2,378	193	367	7,816	13,884	12,648	89.3	78.1	1,671	1,539	—2,931	—409
Great Northern....3 mos.	8,281	55,130	1,804	60,806	59,054	8,706	7,900	1,081	10,859	10,228	3,212	1,702	24,651	49,803	47,096	81.9	79.8	11,004	6,775	3,167	4,515
Gulf, Mobile & Ohio....3 mos.	2,745	21,423	544	23,305	21,775	2,838	2,734	269	4,551	4,305	1,191	849	7,811	17,098	16,244	73.4	74.6	6,207	2,392	2,462	2,445
Illinois Central....3 mos.	6,458	62,500	5,642	73,165	71,280	9,622	9,791	1,236	13,115	13,744	3,670	2,050	29,462	58,526	57,688	80.0	80.9	14,639	7,699	3,853	4,535
Illinois Terminal....3 mos.	340	2,103	....	2,382	2,540	250	260	10	407	427	107	128	946	1,909	1,886	80.1	74.3	474	194	29	213
Kansas City Southern....3 mos.	894	10,258	239	11,729	12,436	934	1,034	175	1,894	1,621	669	366	3,998	7,707	7,636	65.7	61.4	4,022	1,088	1,727	1,945

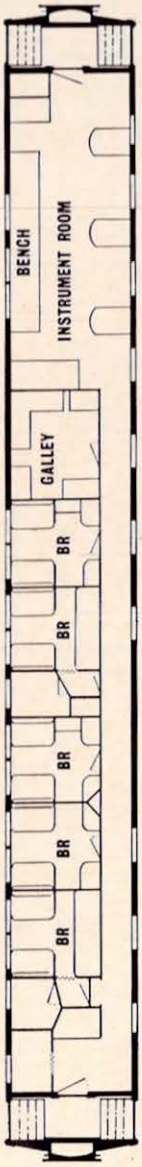
(Continued on page 49)

Railway Age Service Page

REVENUES AND EXPENSES OF RAILWAYS



This is FreightMaster's new rolling laboratory for round-the-clock on-line research



FreightMaster cushioning system (of course)

26-ft Instrument room

Complete galley

Five bedrooms accommodate ten persons

Fully air conditioned

Water storage, 560 gallons

Diesel capacity, 420 gallons

Self-contained 50 KVA power plant

60,000 BTU perimeter radiant heating system

What are the causes of high coupler forces in a moving train? What about side-sway? Vibration? Bounce? Acceleration? Braking? Long grades? Rolling country? Speed?

FreightMaster's new Research Car is now in service, seeking the answers that will result in better ways to protect cargo and car structures, as well as improve the ride for the freight.

The Research Car is equipped with its own computer, digital speedometer, electronic mileage marker, inclinometer system for plotting the terrain, and multi-channel telemetering systems for gathering data from any point in the train electronically.

Research is no project-come-lately at FreightMaster. It began nearly 50,000 FreightMasters ago, and continues at our permanent Test Track installation and in two mobile Test Vans. It has already resulted in a cushioning system that helps protect cargo and car, and needs virtually no maintenance.

But now we're really rolling.

FreightMaster is a division of Halliburton Company, 424 W. Vickery Boulevard, Fort Worth, Texas 76101. Phone 817-335-3046. In Canada, contact Hawker Siddeley Canada Ltd., Montreal. In Mexico, contact Armendariz S. de R.L. de C.V., Marconi Numero 2-37, Mexico 1, D. F.

FreightMaster®

END-OF-CAR HIGH-CAPACITY HYDRAULIC CUSHIONING SYSTEMS

Circle 56 on reader service card

(Dollar figures are stated in thousands: i.e., with last three digits omitted)

First Quarter Figures of Calendar Year 1967

Name of Road	Average mileage operated during period	Operating Revenues: Freight	Pass.	Total (inc. misc.) 1967	Total (inc. misc.) 1966	Operating Expenses: Maint. Way and Structures: Total 1967	Total 1966	Deprec. and Retirements	Maint. Equipment: Total 1967	Total 1966	Deprec. and Retirements	Traffic	Transportation	Total 1967	Total 1966	Operating ratio 1967	Operating ratio 1966	Net from railway operation	Railway tax accruals	Net Railway operating income 1967	Net Railway operating income 1966
Lake Superior & Ishpeming	3 mos.	103	156	....	224	412	280	241	69	367	355	192	8	242	1,002	961	447.6	233.4	—778	152	—898	—580
Lehigh Valley	3 mos.	1,097	10,860	....	11,278	10,809	1,456	1,272	261	1,590	1,643	287	379	5,939	10,085	9,962	89.4	92.2	1,193	991	—975	—1,499
Long Island	3 mos.	322	2,165	16,795	19,648	19,569	3,369	2,714	257	4,370	4,091	445	196	11,008	20,090	18,671	102.2	95.4	—442	1,272	—2,610	—1,135
Louisiana & Arkansas	3 mos.	746	6,147	138	6,705	7,181	673	935	80	1,077	962	451	300	2,475	4,839	4,827	72.2	67.2	1,865	619	667	1,074
Louisville & Nashville	3 mos.	5,644	66,783	967	71,701	67,697	8,997	8,679	1,113	14,957	14,206	6,489	1,917	27,491	57,259	55,178	79.9	81.5	14,442	5,342	7,783	7,111
Maine Central	3 mos.	921	6,255	1	6,376	6,052	1,167	1,145	84	1,235	1,164	284	109	2,243	5,137	4,823	80.6	79.7	1,239	409	516	597
M-K-T Lines	3 mos.	3,017	13,006	....	13,590	13,001	2,323	2,228	246	2,037	2,795	544	673	5,396	11,122	11,548	81.8	88.8	2,468	1,210	—592	—1,457
Missouri Pacific	3 mos.	9,013	71,141	934	78,344	79,999	10,965	9,978	1,190	13,277	13,170	3,416	1,875	27,104	57,117	56,240	72.9	70.3	21,227	6,778	8,260	10,370
Monon	3 mos.	541	4,436	78	4,863	5,090	541	572	56	809	764	213	247	1,880	3,854	3,754	79.3	73.7	1,009	344	313	645
New York Central	3 mos.	9,757	122,196	10,128	153,823	160,609	17,018	16,408	2,993	27,351	27,212	7,198	3,219	77,301	133,136	131,173	86.6	81.7	20,687	11,527	—3,051	8,412
Pittsburgh & Lake Erie	3 mos.	209	6,481	30	7,035	7,444	839	828	180	3,126	2,933	1,159	239	3,009	7,815	7,580	111.1	101.8	—780	1,577	2,182	3,275
New York, New Haven & Hartford	3 mos.	1,555	15,951	9,081	30,397	30,633	4,651	4,348	866	6,276	5,940	1,312	625	16,042	29,924	28,991	98.4	94.6	473	2,466	—5,728	—4,234
Norfolk & Western	3 mos.	7,588	140,528	896	148,122	148,737	14,057	13,330	2,221	23,675	22,879	9,667	3,208	55,072	102,494	99,087	69.2	66.6	45,628	14,556	25,067	29,191
Norfolk Southern	3 mos.	624	2,506	....	2,597	2,198	452	371	67	442	335	161	145	824	2,111	1,827	81.3	83.1	486	200	128	75
Northern Pacific	3 mos.	6,745	40,906	1,213	45,114	45,510	6,247	6,521	831	10,107	9,598	2,929	1,458	20,622	41,913	40,069	92.9	88.0	3,200	5,109	60	2,427
Northwestern Pacific	3 mos.	328	1,967	1	1,994	2,307	827	814	58	133	159	3	18	704	1,777	1,798	89.1	77.9	216	109	—374	—225
Pennsylvania	3 mos.	9,558	172,191	18,953	216,680	219,529	22,111	23,658	4,011	38,715	35,967	9,295	3,187	101,982	177,749	175,877	82.0	80.1	38,931	16,824	581	8,899
Penn.-Reading Seashore Lines	3 mos.	331	1,799	30	1,958	1,856	372	419	81	374	406	70	14	1,349	2,228	2,290	113.8	123.4	—270	166	—845	—1,039
Piedmont & Northern	3 mos.	150	1,606	....	1,671	1,870	162	133	18	115	104	34	116	372	913	837	54.6	44.8	758	326	247	312
Reading	3 mos.	1,232	21,798	1,728	25,945	26,195	3,267	3,285	580	5,177	4,593	1,691	733	10,989	22,049	20,978	85.0	80.0	3,896	1,971	121	1,830
Richmond, Fred. & Potomac	3 mos.	118	4,502	1,163	6,647	6,795	527	573	97	888	989	258	93	2,381	4,387	4,479	66.0	65.9	2,260	1,172	825	787
St. Louis-San Francisco	3 mos.	4,565	34,199	147	36,077	34,940	4,951	5,143	568	5,286	5,278	1,919	1,334	13,318	27,091	26,552	75.1	76.0	8,986	3,842	3,811	3,704
St. Louis Southwestern	3 mos.	1,565	23,873	....	24,104	22,945	1,801	1,898	221	3,532	3,283	1,844	657	7,820	14,530	14,114	60.3	61.5	9,574	3,794	6,451	5,613
Seaboard Air Line	3 mos.	4,122	42,546	3,465	49,768	47,468	5,731	6,284	780	8,773	8,561	3,111	1,796	18,633	37,291	36,440	74.9	76.8	12,477	5,554	4,431	4,838
Soo Line	3 mos.	4,692	20,169	29	20,629	21,245	3,164	2,811	319	3,221	2,946	858	717	8,982	17,109	15,742	82.9	74.1	3,520	1,797	111	1,897
Southern Railway	3 mos.	6,253	73,004	1,205	78,370	77,231	8,189	8,419	1,133	13,355	13,072	3,898	2,095	25,987	54,021	53,053	68.9	68.7	24,349	8,415	10,629	9,406
Alabama Great Southern	3 mos.	327	4,597	83	5,076	4,861	593	531	112	1,009	996	312	137	1,725	3,745	3,600	73.8	74.1	1,331	438	480	489
Cinn., New Orleans & Tex. Pac.	3 mos.	337	9,487	93	10,186	10,734	1,053	1,051	272	2,659	2,439	1,015	293	3,286	7,816	7,546	76.7	70.3	2,371	1,126	1,694	1,938
Georgia Southern & Florida	3 mos.	395	2,443	7	2,540	2,306	471	357	56	177	242	30	61	800	1,622	1,560	63.9	67.6	918	104	14	—33
New Orleans & Northeastern	3 mos.	203	2,729	71	2,958	2,723	463	383	83	662	658	281	82	970	2,382	2,276	80.5	83.6	576	287	239	150
Southern Pacific	3 mos.	11,688	184,772	3,380	197,354	192,783	21,709	21,824	2,419	39,412	37,698	13,452	3,238	78,029	153,716	146,757	77.9	76.1	43,637	20,367	15,126	17,727
Spokane, Portland & Seattle	3 mos.	922	8,535	162	9,318	9,597	1,427	1,254	177	1,552	1,472	434	130	3,734	7,297	6,879	78.3	71.7	2,021	984	475	1,106
Texas & Pacific	3 mos.	1,722	16,426	253	18,293	18,635	2,537	2,714	284	3,334	3,150	1,058	642	7,111	14,445	14,380	79.0	77.2	3,148	979	1,209	1,623
Toledo, Peoria & Western	3 mos.	239	1,930	....	2,092	2,060	203	207	22	177	175	49	169	748	1,469	1,409	70.2	68.4	624	229	127	175
Union Pacific	3 mos.	9,490	122,853	3,741	136,351	134,666	14,971	15,367	1,577	27,140	24,686	12,180	3,825	50,219	103,713	97,252	76.1	72.2	32,638	16,247	15,684	16,990
Western Maryland	3 mos.	866	12,011	....	12,594	33,018	1,799	1,675	190	2,953	3,106	886	424	4,506	10,374	10,310	82.4	79.2	2,220	1,403	1,810	1,915
Western Pacific	3 mos.	1,176	14,224	432	14,986	14,380	1,849	1,853	281	2,772	2,643	926	868	5,469	12,247	11,529	81.7	80.2	2,739	770	1,483	1,388

Railway Age Service Page

REVENUES AND EXPENSES OF RAILWAYS

We won't say a word about our railroad cars until...

(...until you tell us about your distribution problems)

OUR FIELD REPRESENTATIVES can talk for hours about the virtues of our families of freight cars, but their instructions are to keep mum and listen to your shipping problems before they say a word. And they're great listeners.

When their turn comes to speak, you can count on them to come up with answers that will either save you money, speed up delivery time, solve an awkward loading or unloading problem, or increase the over-all efficiency of your distribution and marketing operation.

These answers, of course, will involve the leasing of our freight cars, and you may find it reassuring to know that the kind of answers we come up with have made us the fastest-growing company in the business.

Won't you call us in one of these days? We'll send one of our best listeners.

North American Car Corporation, 77 South Wacker Drive, Chicago, Illinois 60606.

THE GIANT JUMBO CAR

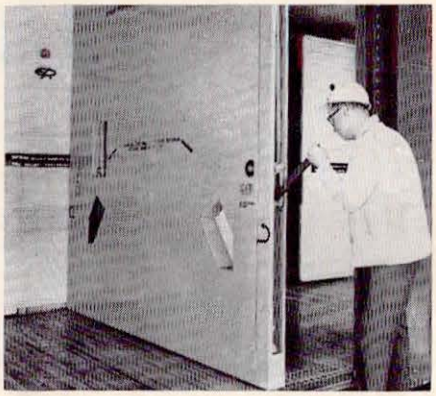
A typical North American innovation

This new 150-ton non-pressure tank car is designed to haul lubricating and vegetable oils, packing house products and chemicals. The car can handle commodities weighing up to 8 lbs. per gallon, with a total weight on the rails of 394,000 lbs. Capacity is 38,000 gallons.

NORTH AMERICAN *creates the cars that solve your problems*

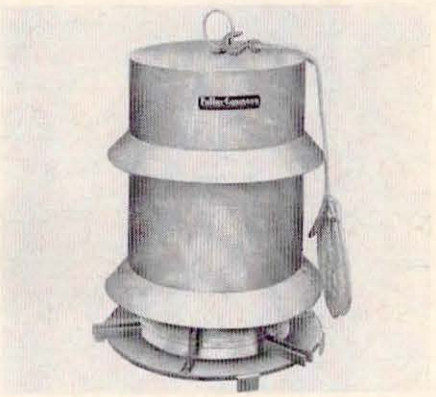
Circle 10 on reader service card

NEW PRODUCTS REPORT



Self-Locking Bulkhead (RA-1)

A handle enables the operator of the new DF-B bulkhead to unlock, move and lock the bulkhead from the loading dock outside the car. The same handle pulled through a slot permits operation of the bulkhead inside the car. The bulkhead's spring-loaded floor and ceiling-pin system is self-locking. The linkage system has fewer moving parts than previously. An optional "inching chain" permits fine adjustment of the bulkhead. *Evans Products Co.*

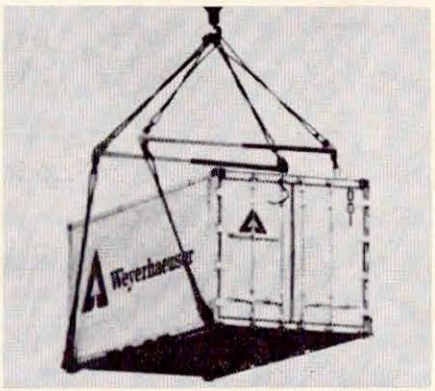


Car Breather (RA-2)

Portable Airslide car breather was developed for rail-car bulk shipments where highly sanitary or contamination-free conditions are imperative during loading and unloading operations. It permits clean venting of fluidizing air from car during unloading or of conveying air while car is being loaded. System permits outdoor loading or unloading under all weather conditions. Hatch hand wheels are used for clamping unit to hatch. *Fuller Co.*

Grain Door Kit (RA-3)

The Grain Door Kit consists of two rolled-up grain doors, 1½ lb of 1-3/4-in. double-headed nails, and two top and two bottom boards. When secured by steel straps, the four boards serve as kit's shipping container. Only a claw hammer is needed to break straps and drive nails. Kit sizes fit doorways 6, 7, 8, 9 and 10 ft wide. Doors are partially assembled in kit, and each is pre-secured to bottom board. One man can install two in 15 min. *Signode Corp.*



Cargo Container (RA-4)

An 8- x 8- x 20-ft standardized cargo container, designed for transporting by truck or rail, can be taken apart from the inside and repaired with ordinary tools in a matter of hours. Punctures can be patched in minutes with a resin patching kit, according to manufacturer. Walls and roof of the container are made of ¾-in. Douglas fir plywood, pressure laminated on both sides with fiberglass reinforcing consisting of 24-oz-per-yd woven roving bonding with 100% isophtalic polyester resin. The floor structure is wood; framing, heavy-duty aluminum. The container can be handled by crane, forklift or straddle carrier. Service life is expected to average 10 to 12 years compared with an average 5-year life of aluminum containers. Replacement of a damaged panel, it is said, would cost about $300. The container has passed all performance tests established by the American Standards Association for Group 1 demountable containers. Units of 20, 30 and 40 ft are also being planned. *Weyerhaeuser Co.*

RAILWAY AGE
THE TRANSPORTATION WEEKLY

30 Church Street, N.Y., N.Y. 10007 READERS' SERVICE (Att. George Johnson)

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PLEASE SEND INFORMATION ABOUT PRODUCTS DESCRIBED ON PAGE 51 MARKED RA-1 RA-2 RA-3 RA-4

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CITY ..... STATE..... ZIP.....
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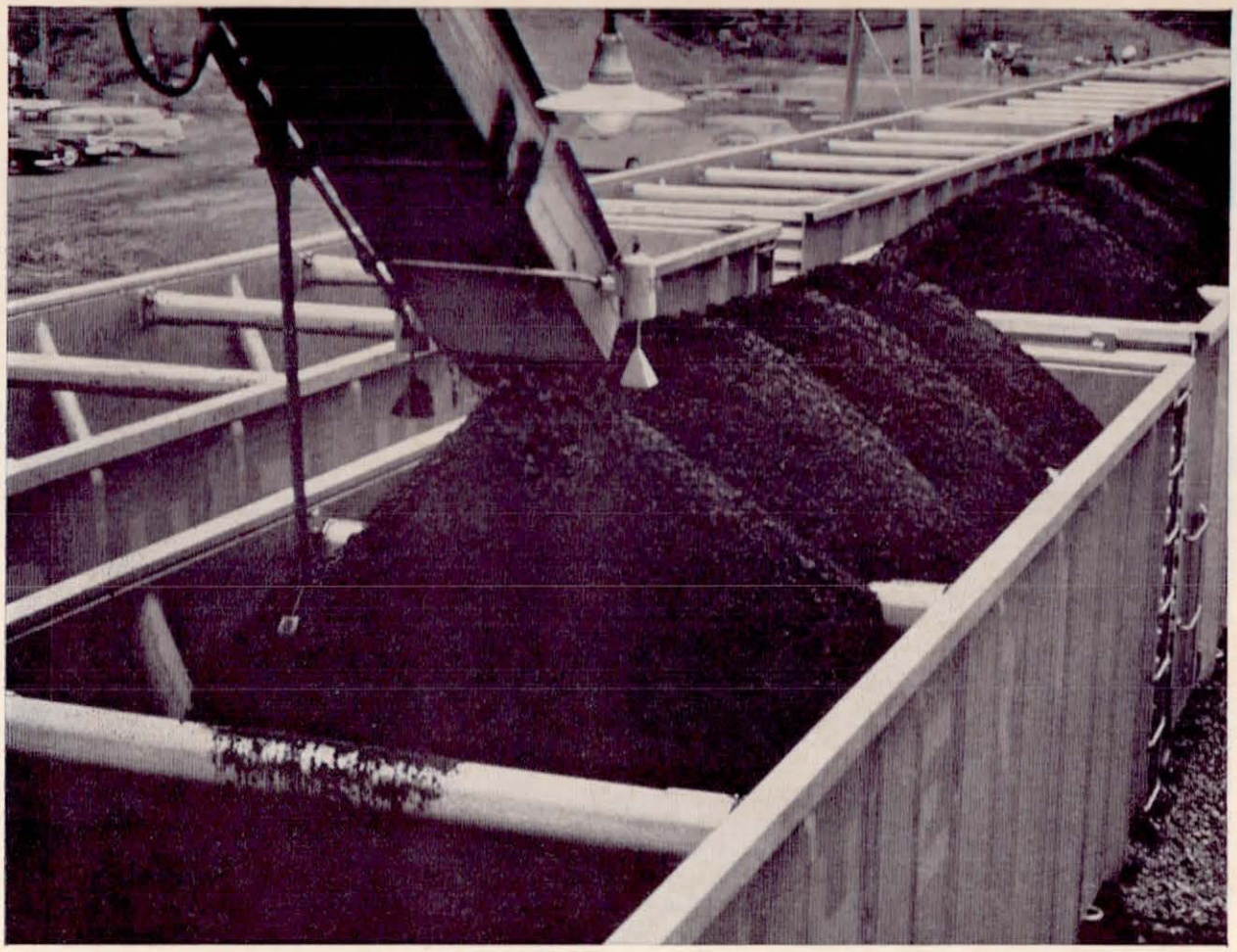
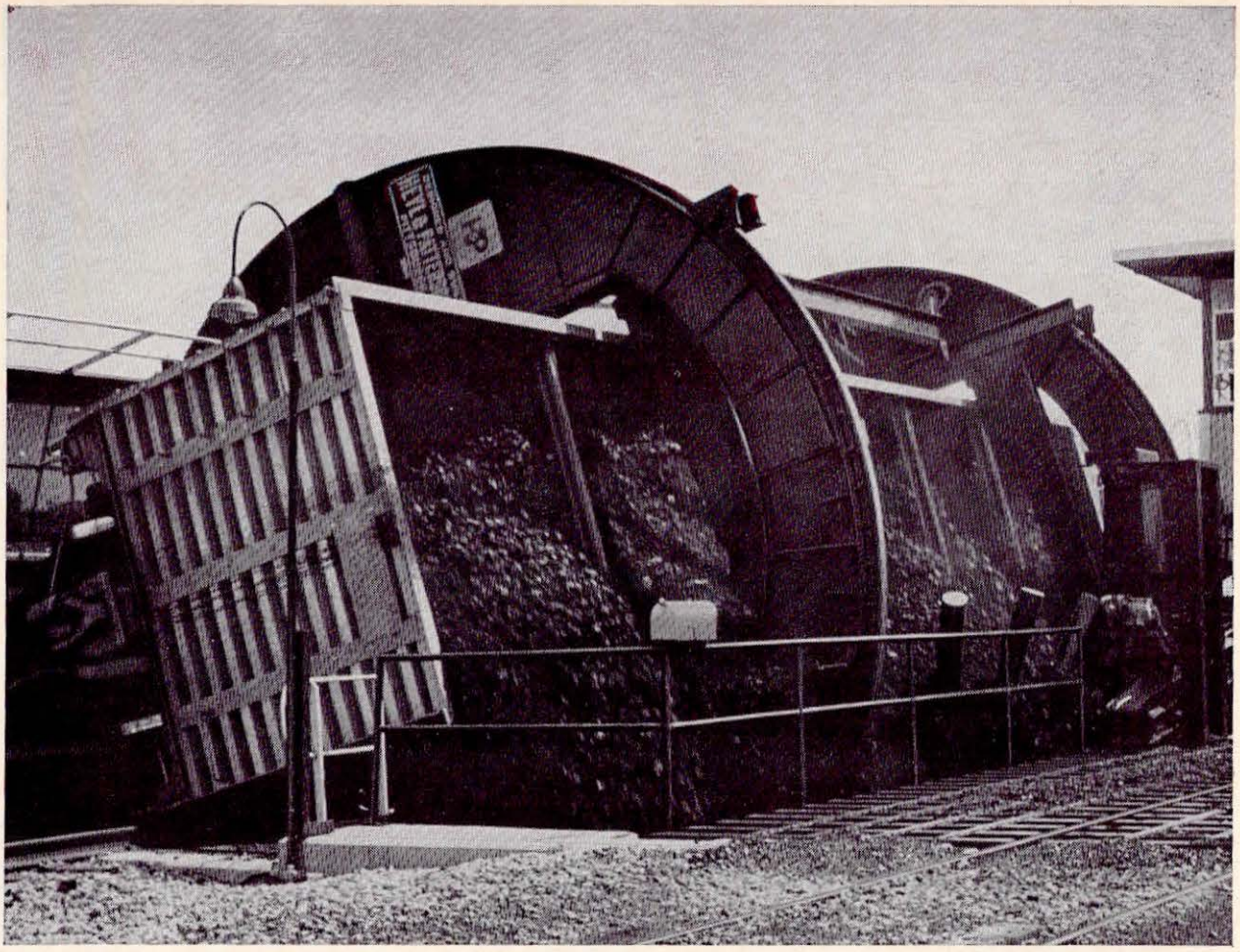


Payloads cost less from here... in unit trains of

In high-frequency hauling of coal, grain, cement, and other bulk cargoes, unit trains are doing a big job these days. And aluminum is demonstrating through daily use that it's a natural for this kind of punishing, maximum utilization service. Open hoppers and gondolas with bodies of lightweight Reynolds Aluminum have paid off in greater capacity, higher earnings, and lower operating costs for railroads—lower rates for shippers.

For example, a unit train of 100 all-steel cars with a gross train weight of 13,150 tons could carry a payload of 10,000 tons of coal—100 tons per car. A train of 100 aluminum-body cars with the same gross weight hauls 10,785 tons of coal—over 107 tons per car. Use of aluminum trades deadweight for *785 extra tons of payload moved with the same crew and locomotive power.*

Pure theory? Proven fact! Five or six days weekly for seven years, the Southern Railway System shuttles two unit trains of 110 aluminum-body gondolas between mines and power-generating plant. This is rugged rotary dump service. Aluminum's lighter weight means a given tonnage of cargo can be moved in fewer cars with less loading, weighing, switching, and unloading time.



...to here

aluminum-body cars

Maintenance costs? Practically zero. Even after millions of ton-miles, aluminum-body cars have had virtually no body-maintenance downtime. Unlike steel, rust-free aluminum eliminates the need for costly slope and side sheet replacement.

Aluminum's strength and corrosion-resistance have been tested by some of the roughest treatment a metal can take. A major midwestern railroad has operated a fleet of aluminum-body open hopper cars in coal service for over *23 years without major body repairs.* Result: Less downtime for maintenance and repairs, better utilization.

Reynolds works closely with the railroad industry to develop new uses for aluminum in hoppers, gondolas, boxcars, and refrigerator cars, as well as components. For the full story, contact your Reynolds office or write *Reynolds Metals Company, P.O. Box 2346-TM, Richmond, Virginia 23218.*

MEMBER RPI aluminum

Watch the
"Red Skelton Hour,"
Tuesdays, CBS-TV

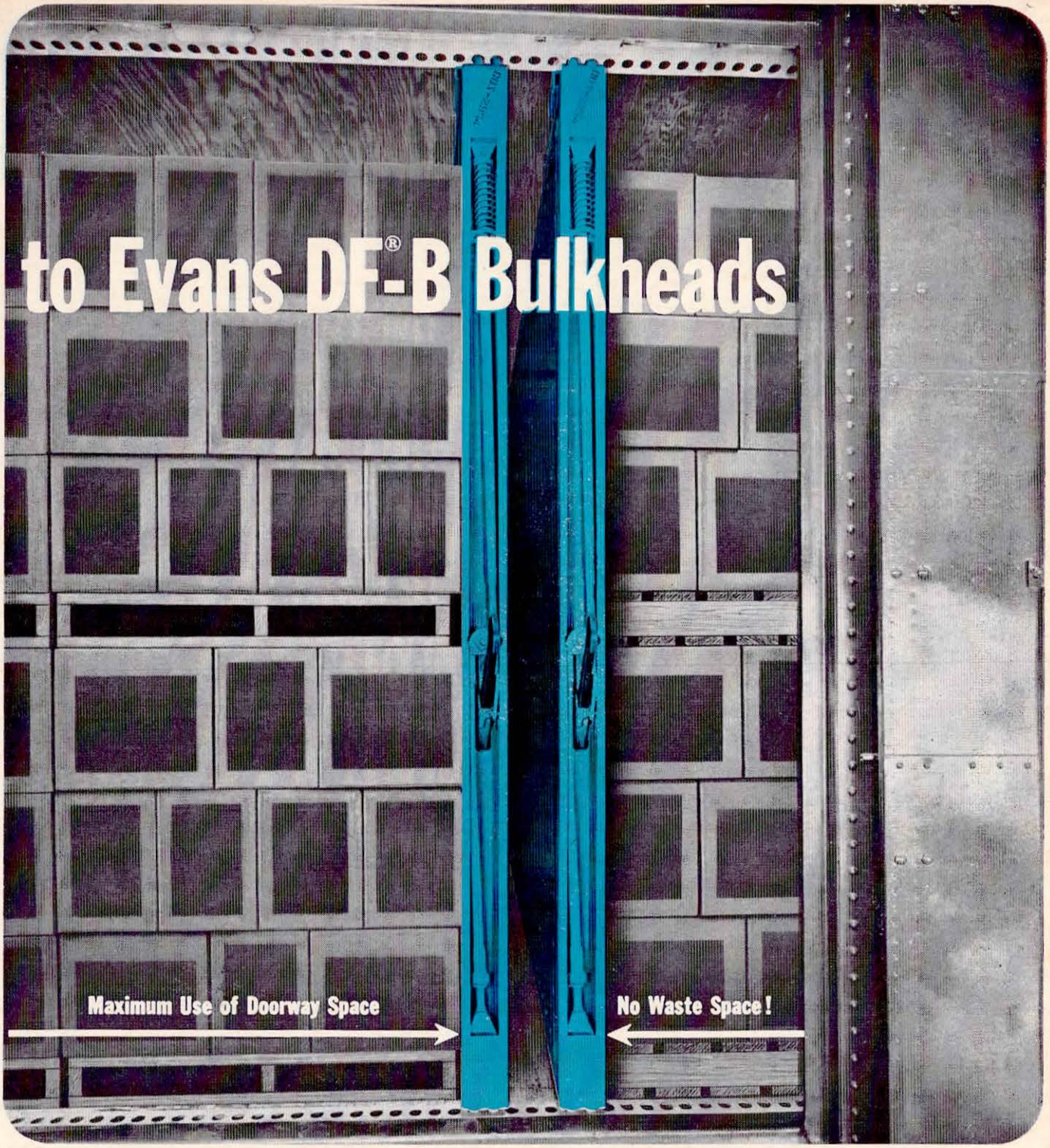
REYNOLDS
where new ideas take shape in
ALUMINUM

Circle 27 on reader service card

NEW! Two-way handle for outside/inside operation. Operating handle at each outer edge of bulkhead pulls through a slot to let operator unlock, move and lock the bulkhead from outside the car. The same handle, when released, drops back through the slot, permitting operation from inside of car. This new handle system has had two years' trouble-free performance in Hi-Cube cars in automotive service. Performance has been so good and the reaction of railroads and shippers so favorable that we have decided to make this handle available on bulkheads used in general service cars, including those in the grocery, paper, chemical, and beverage fields.

NEW! Fine-adjustment positioning chain. Continuous-loop "inching chain," which is optional equipment, permits easily controlled movement of bulkhead for safe, flush positioning against face of lading or away from lading for easy unloading.

NEW! Self-locking for maintenance-free performance. Spring-loaded locking system forces pins to seek the nearest locking position. This assures automatic, positive locking whenever the operating handle is released. The bulkheads cannot move in transit even if the operator forgets to lock them. Fewer moving parts than ever before. Much easier to maintain.



YOU CAN NOW LOAD 56 PALLETS PER CAR!

NO NEED TO WASTE CAR SPACE when car is equipped with Evans bulkheads, adjustable side fillers and staggered oversized doors. **Shipper can load as many as fifty-six 48" x 40" pallets per car.** Evans new two-way handle, self-locking bulkhead reduces amount of space usually needed for operating clearance between bulkheads. Permits virtually back-to-back positioning of bulkheads and maximum use of car space. No hand-loading necessary, even in door area.

evans

TRANSPORTATION EQUIPMENT GROUP
Dept. A-5, Plymouth, Michigan;
Canadian Rep., International Equipment Co., Montreal.
Member RPI and ARCI.

Circle 63 on reader service card

Why spend the capital to buy it?

Should I install an automatic or a manual system?

Will it detect hot roller journal bearings?

Let's face it, the purchase of a Servosafe® Hot Box Detective System is a capital investment. When you buy such a system you're going to be spending a substantial amount of money.

The thing to remember is that you're not buying hardware alone—you're buying *a data processing cost control system!* Compare the cost of a Detective System with that of a small computer, and you'll realize it's a relatively modest investment. For that investment you can have a record of every journal that has passed the scanners.

And for that investment—because of the very nature of the system—bearings that are running hot are located so that something can be done about them before they fail. Records show that only one out of ten abnormal journals detected by the Hot Box Detective System has needed a new wheel set. With the old visual detection methods, nine out of ten journals had to have a new wheel set. The savings in repair and shop work can be immense!

To be blunt, you buy our system to avoid one of the greatest capital losses a railroad faces—a wreck. Our system locates hot boxes before they result in axle burnoffs that are the largest single cause of derailments.

You can't—and we can't—estimate the cost of a wreck in advance. We can only quote what one railroad official said to us: *". . . Save one wreck . . . and the Servosafe Hot Box Detective System has paid for itself."*

If cost control is a prime management objective for you, consider the Servosafe Hot Box Detective System. We'll be glad to answer all your questions about it. Write us at the address shown at right. Or call collect.

The system you install must be one suited to your needs. Each railroad has particular requirements which determine its assignment of responsibilities. You may delegate hot box surveillance duties to the train crews. Or, you may wish to keep the dispatcher informed, or in charge. Your needs, then, are a function of what you do, and how you're organized to do it.

Servo keeps this in mind. If your requirement is for surveillance of incoming yard traffic, Servosafe® scanners located outside the yard entrance pinpoint malfunctioning journals as they arrive. This is usually a manual system with tape readout provided to the car inspector. Yard crews go directly to cars in need of maintenance, thus providing fast, thorough and selective servicing.

On outbound trains, scanners are situated about 25 miles out to allow journals to reach normal operating temperatures. Any hot boxes developed can be easily detected. This system is generally manual, with tape readouts made available to the dispatcher or operator.

The line of road type can be either a manual or automatic system. In either case, scanners are set at intervals along the right of way. As the train passes, the scanner's information is communicated to a point at which the readout is provided. In a manual system, the readout is usually on tape read by a dispatcher or operator who notifies the train crew. An automatic system generally features a visual display, and is designed for attendance by the train crew.

Your arrangement will indicate the system you need, and the location of recorders, alarms, annunciators and signals. It will govern the extent of your investment in carrier or radio communications links, or the extent to which you use existing communications facilities.

Whatever your questions, Servo is ready to help you answer them. Call or drop us a line.

Yes, we find them every day. And Servosafe® does it better than other detecting devices, too.

While it is true that the hot box incidence rate is lower for roller journal bearings, hot boxes still occur. And when they do, they approach a critical condition faster. The roller bearing disintegrates rapidly, without the time lag common to friction bearings. Your detector must spot the hot bearing fast. And the fastest way for you to spot it is at the source.

For the detector to sense heat at the wheel hub, side frame or arch bar, the heat has to dissipate—and that takes time—time you don't have with a hot roller journal bearing.

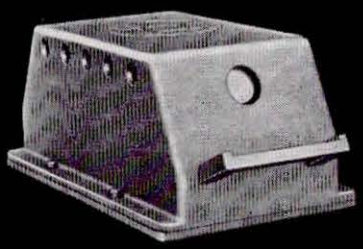
Servo reads what is actually happening —*when* it's happening and *where* it's happening. We read the heat at the source. After years of research and field testing, Servo selected its "slant-aspect viewing" design as the most efficient and reliable method of scanning. It is patented and exclusive with Servo.

The scanner's line of sight is focused at a relatively small spot on the side of the journal box. As the train moves away, the spot moves upward and inward along a diagonal line. If the train is approaching, the path is the same, but the spot moves downward and outward with the movement of the train.

A Servosafe Hot Box Detective System is your answer to the hot roller journal bearing problem. Your answer to efficient and reliable hot box detection. Write us today with any questions pertaining to *your* system.

Circle 52 on reader service card

The Servosafe® Hot Box Detective System



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Passenger losses cut freight car purchases

SP's Biaggini says passenger train drain also hurts efforts to hold down freight rates.

The more than $400 million that U.S. railroads lose annually because of passenger operations is a major reason why many roads can't afford to buy their quota of much-needed freight cars.

"When we talk about the passenger deficit problem, we find that few people recognize the enormity of the loss," Southern Pacific President B. F. Biaggini declared in a Transportation Week address in Portland, Ore. He made a plea for broader public understanding of railroad attempts to curtail the passenger deficit.

"The long distance passenger train in this country has lost its purpose in the light of very evident public preference for other modes," the SP officer added. "This preference has been clearly expressed in the voting of huge amounts of public funds for highways and airport facilities. The public has, in effect, voted the passenger train out of existence."

• **Learning the hard way.** Southern Pacific, said Biaggini, spent millions on a fleet of new streamliners, and more than a million dollars a year to advertise them.

"No railroad has done more to woo and keep its passengers, yet even this had no effect against the massive attrition that was being experienced throughout the railroad industry."

He said 1954 SP passenger losses, at more than $58 million, were eating up 55% of what the road's freight services were earning. At the same time SP was faced with gigantic expenditures to keep its freight operations up to the demands of the growing economy of the west.

"It was time to take some realistic action," Biaggini stated. "Gradually, in the intervening 12 years, by discontinuing as many unused trains as the regulatory bodies would permit, and by tailoring other features of the service to fit the steadily declining demand, we have been able to reduce that $58 million annual passenger deficit to about $16 million last year." But, he added, this still represents 20% of SP earning from freight services. "And it still represents a heavy drag on our ability, in the face of steadily rising wage and material costs, to hold down our freight rates and to finance improvements in those services where we can make a very real contribution to the economy."

• **Question of public interest.** "In the case of the 'Shasta Daylight' for example," Biaggini pointed out, "does public interest lie in perpetuating a steadily mounting annual out-of-pocket loss which during last summer's operation reached $400,000, as the average daily passenger load declined from 123 the year before to only 88—less than a plane load? Or does the real public interest lie in putting this money to productive use in expanding our program of facility and service improvements which have made it possible for us to save Oregon industries $108,-440,000 in reduced transportation costs since 1957?"

He said the annual $400,000 out-of-pocket loss on the Shasta would be enough to make the down payment each year on 150 additional wide-door box cars or to finance other improvements.

"Through all the pleasant haze of nostalgia for the romance of train travel, the cold fact looms that the long distance passenger train is dead and no amount of prayer or wishful thinking can bring it back to life."

Biaggini admitted that such statements "usually generate prompt reactions from small groups of railfans who yearn for the dear departed days of opulence in rail passenger service as part of their hobby," labor leaders fearful of job losses, some regulatory bodies and "a rapidly diminishing number of railroaders who see some elusive and untraceable promotional value in operating profitless passenger trains."

He said many commuter services still meet a need and must be continued, even though they run at substantial losses because crews and equipment are idle except at morning and evening peak hours.

"Southern Pacific operates this type of losing service," he pointed out, "from San Francisco to points as far as 50 miles south along the San Francisco Peninsula. But 12,000 commuters depend on it to get to and from the city every day, so it serves a real need, and we are planning to buy some new equipment for it if a pending application for a fare increase is approved." ■

FIRST STEP: CONTAINERS ARE LOADED
The 322-cubic-feet aluminum boxes in the inter-model experiment are shown being loaded in Denver.

CB&Q's rail-air

SECOND STEP: ROLLING ALONG ON THE BURLINGTON
Loaded containers, aboard a flatbed trailer, were moved quickly to Chicago, piggyback-style. This rail portion of the

THIRD STEP: TRANSFERRING THE CONTAINERS
At Chicago, the loaded trailer was grounded and moved to O'Hare Field.

NOW, PREPARING TO GO ALOFT
Containers are being placed aboard a Pan

experiment aims at the future

run was made in double-piggyback fashion.

The first operation involved four containers that went from Denver to Chicago to London in 57 hours on a Burlington-Pan Am routing. More such test runs are definitely in the offing.

Sometime in the future, when the giant air-freighters start flying, whole new sets of values may be placed on freight movement—and Burlington is determined that the railroad will be in on the action, to the maximum extent.

Burlington traffic people are giving a hard look, right now, at the economics of the big planes—and at the air-cargo distribution patterns that seem to be shaping up. They've got one eminently successful rail-air movement behind them—and they're looking forward to more test runs. As Assistant Vice President-Sales Fred E. Deines puts it, "we're going to probe every imaginable source for new business."

The first experimental rail-air operation involved four containers, moving Denver-Chicago-London on a Burlington-Pan Am routing. Elapsed time for the movement: 57 hours.

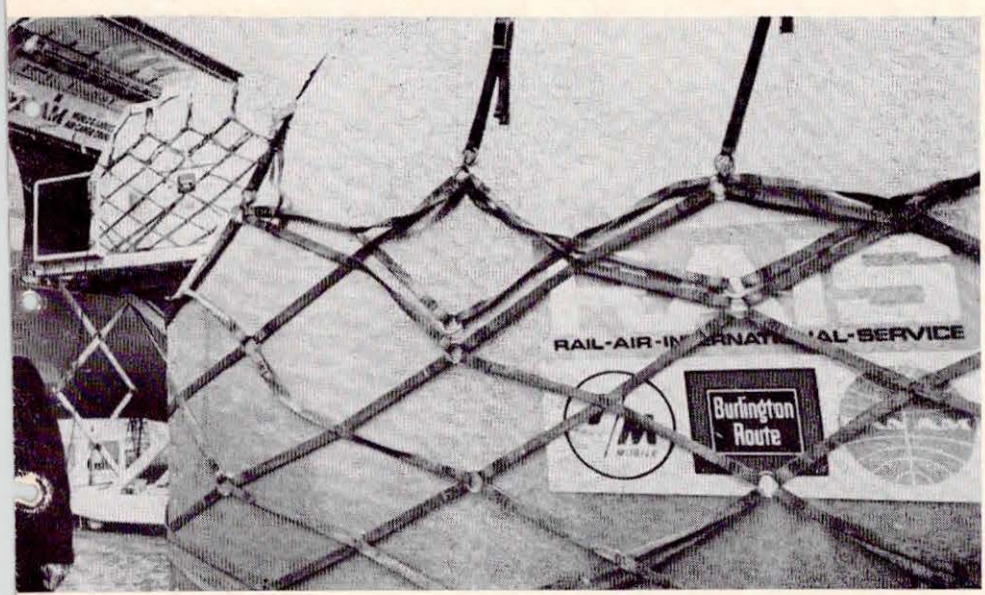
It went like this: Wilkerson Corp., Robbins Incubator Co. and Coors Porcelain Co. loaded the boxes at their Denver facilities. Containers were then placed aboard a flatbed trailer—which Burlington hustled to Chicago, piggyback-style. The trailer was then grounded and moved over-the-highway to Chicago's O'Hare Field, where the containers were stowed aboard a Pan Am jet freighter for the overseas flight.

Admittedly, this first test was an elementary thing, compared with the sophisticated operations envisioned for joint movements of the future. The aluminum containers, built by Trailmobile for the rail-air experiment, were small—with capacity of only 322 cubic feet and weight capability of 7,000 pounds. They were also designed for existing aircraft and, under the circumstances of the test, they had to make the rail run in double-piggyback fashion—container-on-trailer-on-flat-car.

Still, the test proved the feasibility of such a rail-air tieup—and the operational sophistication will come later, in 1970 and beyond, when the airlines take delivery of the monster planes.

As for the economics, for railroads, airline and shipper it will be a matter of judgment decisions on time vs cost. Traffic men surveying the situation today think it's quite possible that the airlines won't want to have the big planes hopping from airport to airport, and that there can be a definite ground-support role for the railroad in moving containerized shipments between interior points and major international air cargo terminals.

Deines and Burlington's general manager-freight sales, J. D. Rezner, sum it up: RAIS—for rail-air international service—has to be tabbed as an experiment, part of Burlington's traffic-probing operation. But it was an experiment that may lead to great things. Says Deines, "we're ready to cooperate with Pan Am or anybody else to determine the feasibility of this kind of operation. We're thinking more of the future than the present." ■



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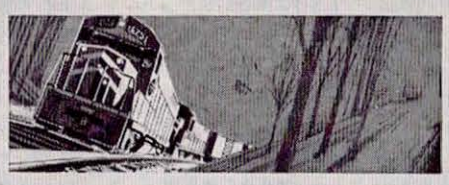

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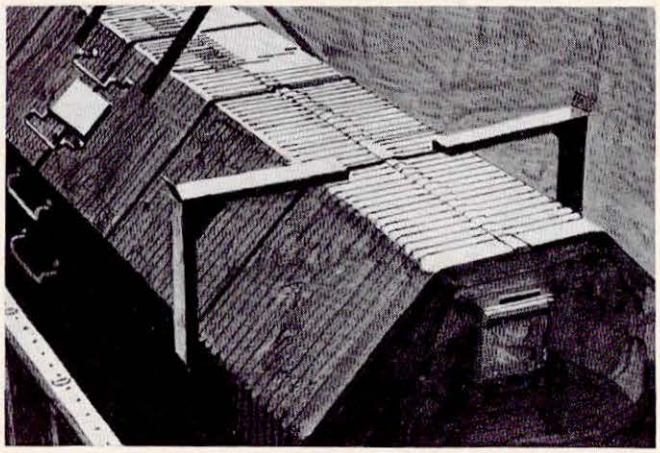

Sometimes your freight dispatcher needs the material handling advantages of a flatcar, with the freight protection of a boxcar.

A flexible compromise, Republic Coil Covers. In minutes, you can cover freight on an open flatcar or gondola with the same crane used for loading. That gives weathertight protection plus faster, more flexible freight handling, without added car investment.

Republic Coil Covers stack near trackside on specially designed stacking brackets. Their tough 13-gage, reinforced steel construction can take the scrapes and slams of years of on and off crane handling.

Used two to a car, covers measure seven feet high, seven feet wide, and 22' long. Special air vents encourage air circulation (to prevent condensation) but keep rain and snow out. Inspection doors permit random checks of cradle and hold-down devices without hoisting the cover.

We also make a 3-section gondola cover to fit any standard gondola. Weather seals between adjoining sections keep everything inside dry, while clamps and centering pins hold covers in place during transit.

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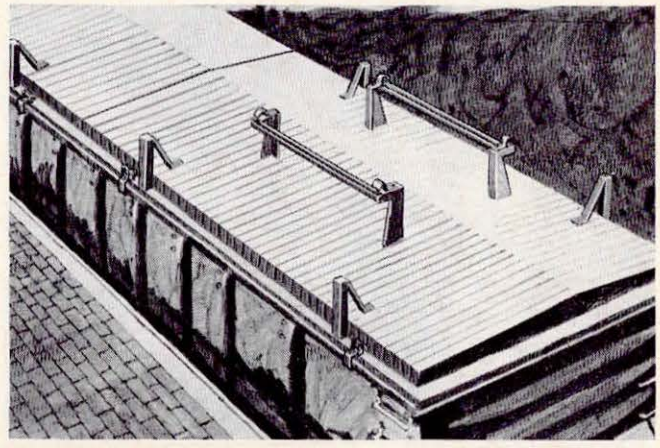

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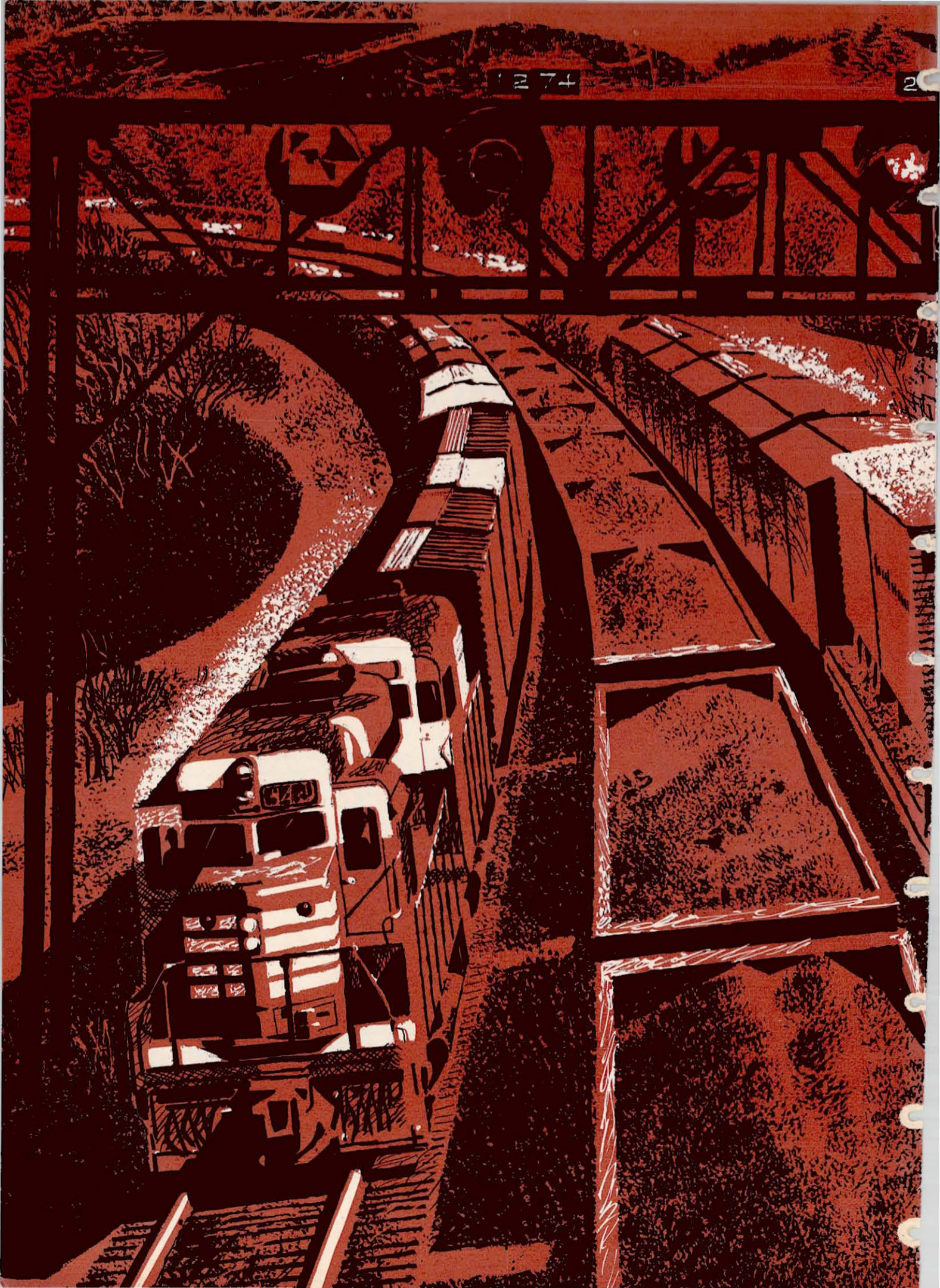
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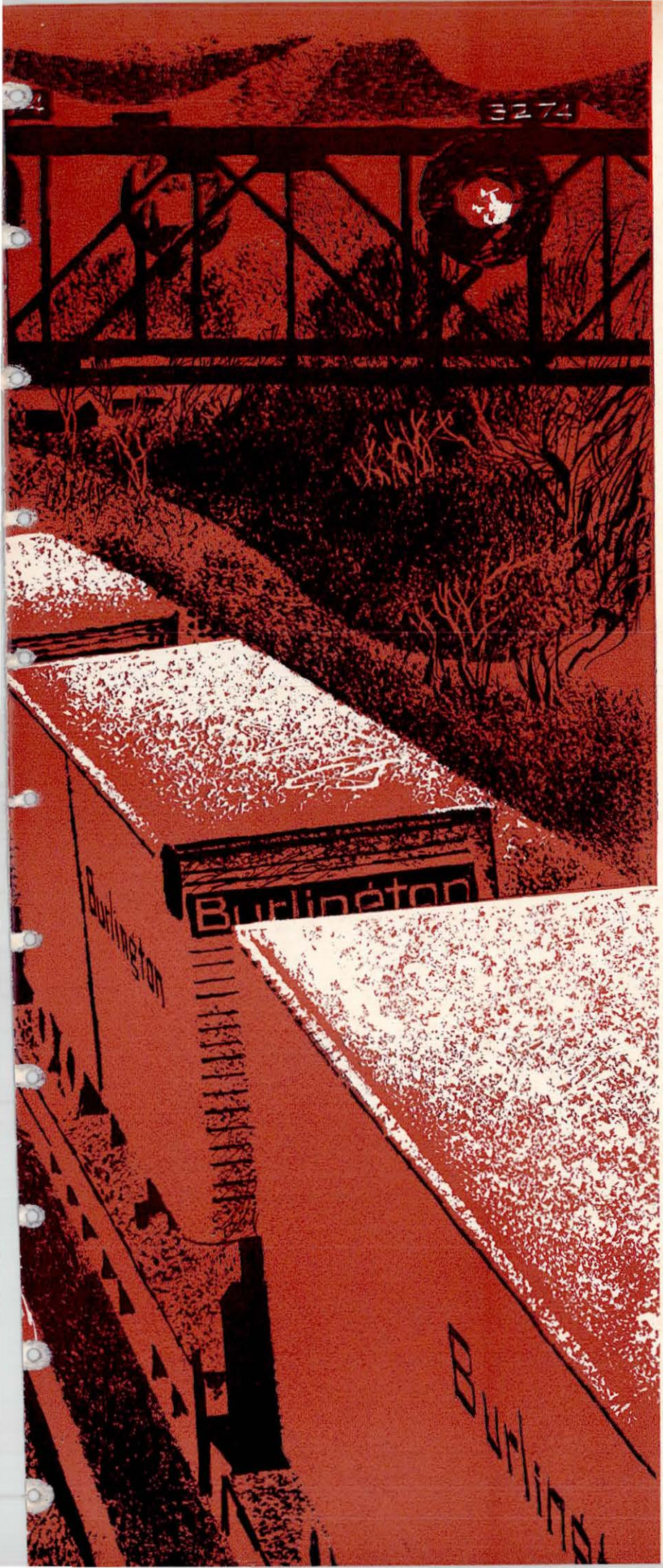

A four point report on Burlington's continuing progress in railroading

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One of the most dynamic turn arounds in railroad shipping is being accomplished by Burlington. To generate new traffic and meet the volume freight loads required by such service, Burlington has moved ahead in four important areas:

1. Burlington's 3-track mainline between Aurora and Chicago funnels commuters, hot-shot freight trains and overnight passenger streamliners into the mid-western megalopolis, during the busy morning rush hours. The three, high-capacity tracks are signaled for operation in both directions. At night the procedure is reversed between Chicago and Aurora where Burlington's mainlines diverge to the twin cities (Minneapolis/St. Paul), and St. Louis, Kansas City, Omaha and Denver.

2. Burlington is building and repairing a great number of cars at their own shops. The road is also purchasing large numbers of specialized cars from outside builders. Typical of Burlington's technological progress are the giant polyurethane-foam-insulated box and refrigerator cars the line builds at their own Lincoln, Nebraska, shops.

3. To overcome the problem of limited space, Burlington made its Cicero (on Chicago's western border) automatic classification yard, one of the most efficient in the industry. A 100-car freight train can be inspected and classified in one hour. Direct transfer switching service links various railroads serving the Chicago area.

4. Within the Cicero yard, the industry's biggest and fastest piggyback crane is helping to pace the railroad's burgeoning T.O.F.C. traffic. This specially designed mechanism loads and unloads trailers with pinpoint accuracy in 90 seconds.

Burlington "kicked off" the diesel revolution in 1934 when the line introduced its Zephyr streamliner. American Oil Company has been a supplier of diesel lubricating oil and diesel fuel to this famous railroad ever since. American Oil Company, 910 S. Michigan Ave., Chicago, Illinois 60680.

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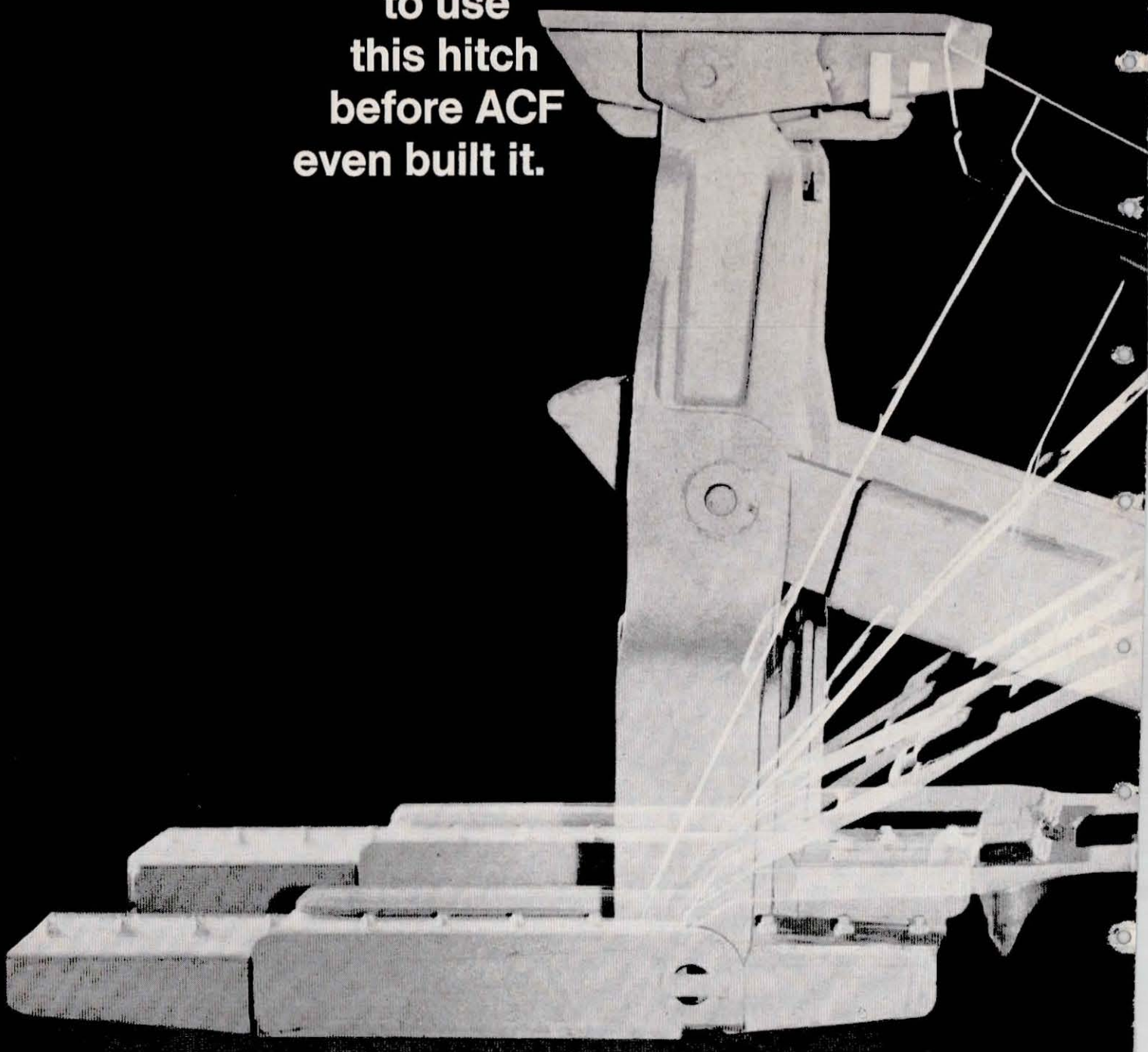

Before our new tractor-operated hitch was introduced, over 40,000 wrench-operated ACF Trailer Hitches were already serving the railroads. This represents over 85% of all hitches used in TOFC operations. Impressive experience? You bet it is. And there are a lot more reasons to stay with ACF when you need tractor-operated hitches.

ACF's new tractor-operated hitch elevates and locks entirely automatically. The driver controls the operation from his cab. The hitch is self-contained. It installs on any flat car. New wide-straddle legs and an extra-wide support plate assure great lateral stability, and the plate protects the trailer's king-pin area. In transit, ACF's new rubber-in-shear mounting provides vertical and lateral as well as longitudinal cushioning.

Take your pick between ACF's wrench-operated or our new tractor-operated trailer hitch. With either you can count on safety, economy, ease of operation. For further details contact American Car & Foundry Division, ACF Industries, Incorporated, St. Charles, Missouri 63301.

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Porter forged hardware fits almost any type and size of door. It can be used as original or replacement equipment. For more information, write Fabricated Metals. Porter Building, Pittsburgh, Pennsylvania.

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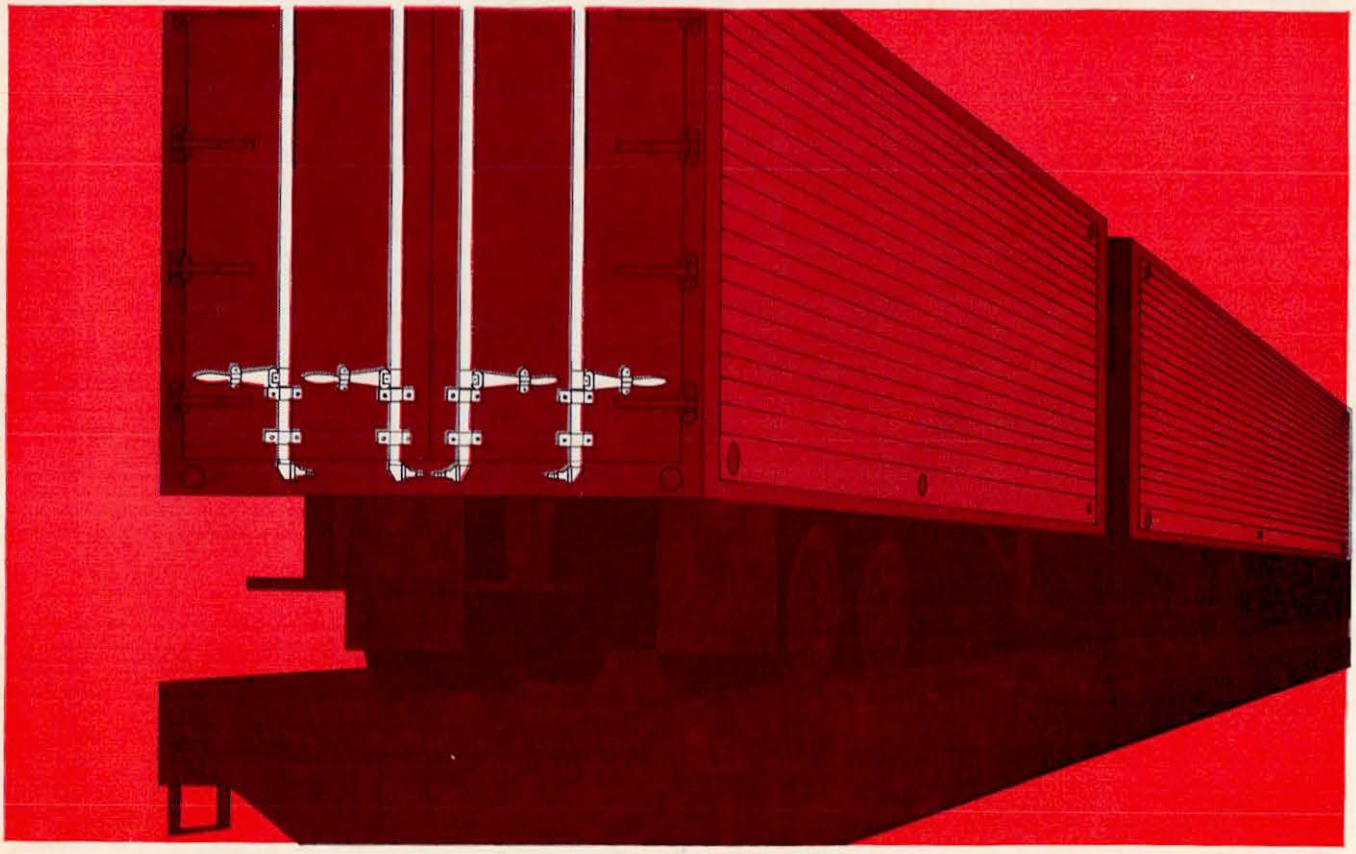

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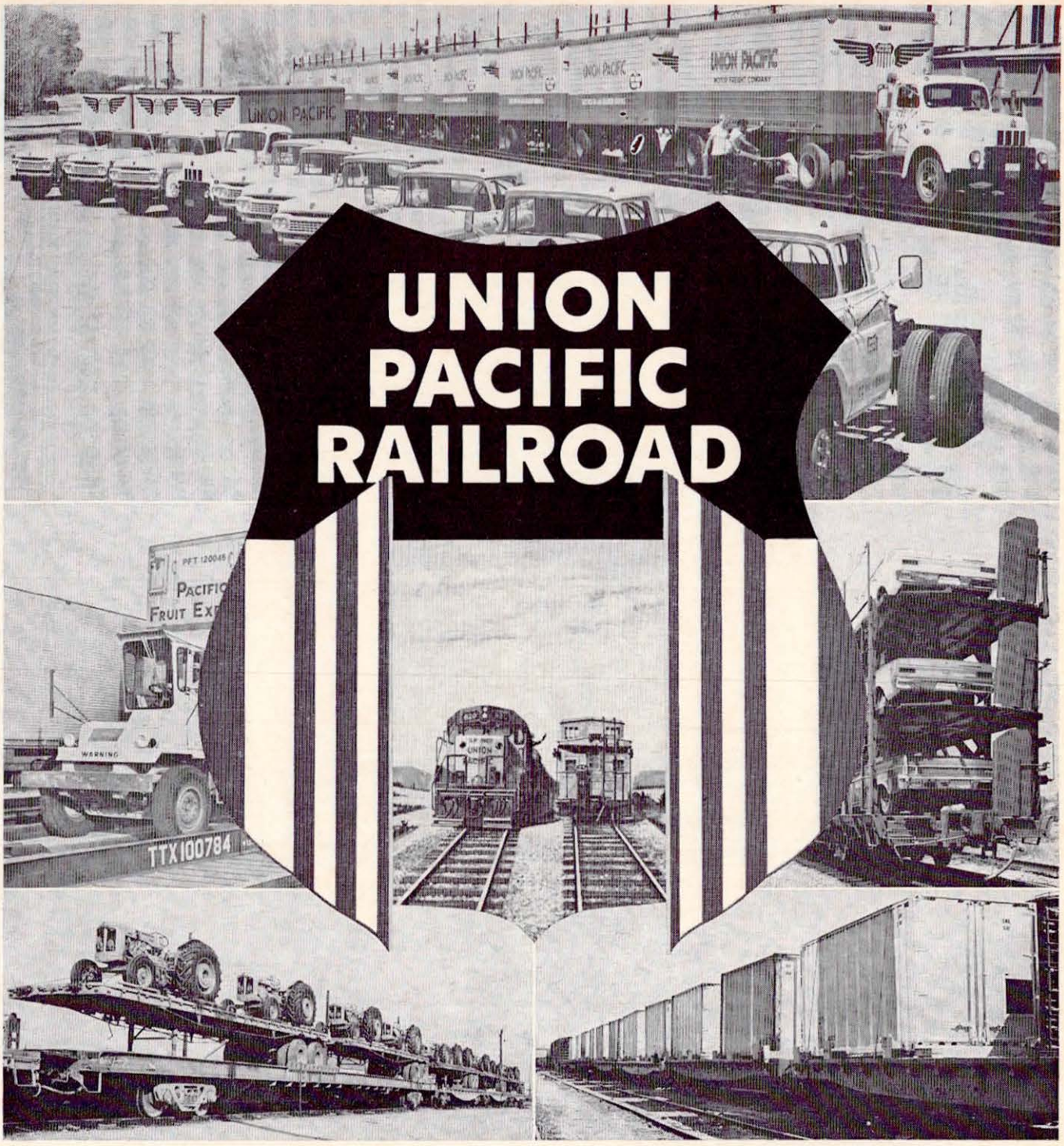

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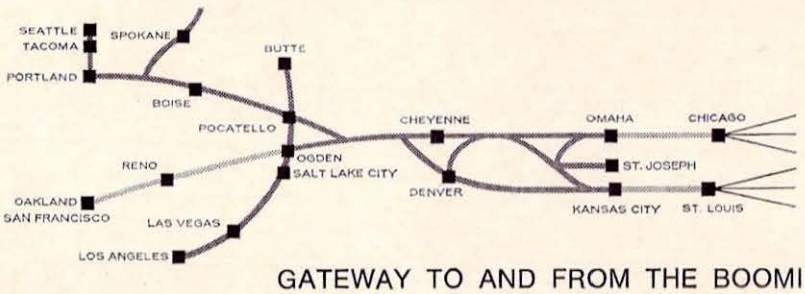

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GATEWAY TO AND FROM THE BOOMING WEST

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Computer speeds L&N cars through terminals

"We are making substantial inroads toward improving movement of cars through terminals," Louisville & Nashville President W. H. Kendall told the New York Society of Security Analysts on May 19.

His railroad's efforts to eliminate "this classic bottleneck" involve, Kendall said, "a small computer which establishes switching priorities for all cars and at the same time forecasts the motive power that will be required to move trains from the terminal."

First installation of such a computer has been made at the L&N's largest yard, Radnor, at Nashville, Tenn. "This pilot program is the first step in effecting such local operating control at all major yard facilities, with advance car information being fed from our central system in Louisville."

The yard operations described by Kendall are only one of many uses to which L&N is putting its comprehensive computer-based information network. "Already," Kendall told the analysts, "we have improved utilization of special fleets of cars by as much as 60-70% by computer monitoring and decision making providing optimal movement of empty cars. A dramatic example of this is our use of a linear programming technique to distribute 2,000 wood rack and wood chip cars on a daily basis. We are now developing plans for a similar approach in distributing our 32,000 open-top hopper cars.

"We are presently establishing a pilot program of reporting expenditures on a daily basis directly from the field as related to our maintenance-of-way operation, these expenditures then being compared to an itemized budget for maintenance."

L&N also has what L. W. Adkins, vice president for accounting and taxation, says he believes to be "the nation's most comprehensive computer-based railroad information network.

"In 1965 we inaugurated our first on-line car information system. It provided instant replies to questions about the location of any car on our line. Today we are using new IBM System/360 computers to expand and improve that system to include a complete data collection, processing and dissemination network."

Eventually, Kendall told the analysts, "I visualize our over-all data processing program as allowing consolidation of a current, accurate 'book' on status of all major rail operations; a current, cumulative cost picture of the company's operations; and current forecasted shippers' orders. Our 'data bases' in Louisville can then be interrogated routinely or as required as to the most profitable decisions to be made in light of our service requirements."

Kendall also expressed optimism over the prospect of extension of direct L&N service to Chicago, through acquisition of the Evansville line of the Chicago & Eastern Illinois; and confidence that the L&N's lease of the Western & Atlantic would be renewed.

He further reported that the road is preparing to test a prototype of its Side Gate/100 XHC 100-ton side-discharge hopper car. This is designed to empty a 10,000-ton coal train in less than 15 minutes, with "a minimum of equipment" either on the car or at the unloading point. ■

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Rail technology: Where more freedom is needed

The U.S. railroad industry has available the hardware to build the finest and most efficient transportation machine in the world—"were we allowed to do so"—says New York Central President Alfred E. Perlman.

Perlman, speaking at a luncheon marking the 10th anniversary of the Central's technical research center in Cleveland, said a maze of regulations hamper and restrict the railroad industry's full use of the benefits of modern science and technology.

"Today, we have the science and the physical capability for the complete automatic operation of our plant and equipment, yet we must leave the use of this hardware and knowledge to other countries where regulations and the labor climate are more favorable for their use. It is ironic," he said, "that the United States, the most economically powerful nation in the world, has allowed its basic transportation facilities to nearly dry up."

Perlman noted that in the late 1950s, Japan's mass transportation problem between Osaka and Tokyo was similar to the present situation in the northeastern part of the U.S.

"The Japanese recognized a social need for railroad passenger transportation in this highly congested area," he said. "As a result, they built the New Tokaido Line which represents an investment of $5 million a mile." This, he noted, compares with an investment of $170,000 a mile for the Central.

Central's president emphasized that much of the technology of the 100-mph New Tokaido Line was actually developed in research laboratories of American railroads.

"We have had this technology for high-speed railways for years," he said. "But the example of Japan's new rail line proves that it takes the support of a national treasury and the support of the people to make this type of service a reality."

Perlman said that the company's research laboratory, the Cleveland Technical Center, has played a significant role in the development of high-speed trains. Last July the Central ran a jet-powered test car and established a new U.S. rail speed record of 183.85 miles per hour. The test car was equipped with more than fifty scientific instruments and provided the railroad with valuable data.

"New York Central's pioneering efforts in applied research are producing dramatic results," Perlman added. "The Central spends many millions of dollars a year in the field of technical, cybernetic and marketing research, and the future of our company depends in large measure on the fruitful application of these research endeavors." He emphasized that "the end of this research is not to prove a theory but to improve services and reduce the cost of transportation to our customers."

It was through research, he said, that NYC was able to mothball the only coal pipeline built and make it economically unsound to build another. "It was also through research that we were able to recapture the finished automobile business back from the subsidized waterway and highway carriers. In fact, the New York Central alone transported 1,110,000 vehicles last year, and this was accomplished despite a slowdown in auto production." ■

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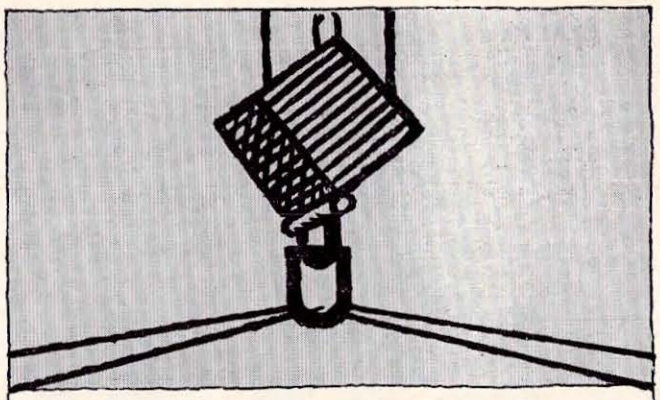

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B&M accident report calls for new laws

Legislation giving the Department of Transportation's Federal Railroad Administration authority to prescribe minimum requirements for main-line railroad passenger cars operated in interstate commerce has been recommended by Examiner Robert R. Boyd. He has also recommended an immediate FRA study of exits from rail passenger cars, including particularly self-propelled cars, in the event of emergency.

The recommendations came in Boyd's report on the collision between a Boston & Maine train and a tractor-trailer combination on Dec. 28, 1966, at a grade crossing in Everett, Mass. When the collision occurred, the investigation of railroad accidents was under ICC jurisdiction, and Boyd started work on the case as a Commission examiner. The Commission's safety functions went to D.O.T. on Apr. 1, and the present case—Ex Parte No. 254—was part of the unfinished business then transferred. Boyd was among former Commission employees who went to D.O.T. at that time.

• **Fire caused casualties.** Eleven passengers and two train-service employees were killed and 18 others were injured in the accident, which occurred at 12:01 a.m. The trailer was loaded with fuel oil which burst into flames, and that caused the fatalities and injuries to the passengers and crew members trapped on the train which consisted of a self-propelled car. "No passenger was seriously injured from the force of the impact," Boyd reported.

The basic cause of the accident, he found, was "either a failure in the tractor brake system of the motor vehicle which caused an unreleasable application of the brakes, or a mechanical failure of the tractor in some other respect, prompting, in turn, the stalling of the motor vehicle on the rail-highway grade crossing in front of the approaching train."

• **Brake release device proposed.** Out of this finding came a recommendation calling upon the Federal Highway Administration (also in D.O.T.) to make a new study of the brake-release system of motor vehicles in terms of a recommendation made by the ICC's former Bureau of Enforcement and Compliance. That recommendation calls for equipment for releasing brakes by a method which requires the driver to maintain constant pressure on the release mechanism. A constant-pressure requirement is considered necessary to insure that any defective vehicle would be operated only until it was removed from a hazardous position on the roadway.

Among other recommendations of the former ICC Bureau is one calling for reduced train speeds in congested areas, and where there are many grade crossing with poor sight distances. Boyd rejected it with this comment: "For the life of the railroad passenger service, we must first make every effort to attain safety without taking a backward step relative to speed."

• **Passengers trapped.** Explaining what he had in mind for an immediate FRA study of car exits, Boyd said such a study should deal with "emergency equipment, emergency exits, and the use of sliding doors—provided that the consideration of automatic or power-operated sliding doors also considers the requirement that such sliding doors be easily operable manually in an emergency." This recommendation was based on findings that the trapped passengers were unable to get out of the car because they were pressed against the rear door which opened to the inside, and there was no alternative means of emergency exit. However, there was no criticism of the railroad. "The record," the report said, "does not show that any federal laws or rules and regulations of the Interstate Commerce Commission, or of any other federal agency or organization, were violated."

• **Would reopen crossing case.** Another Boyd recommendation is that FRA reopen the investigation of rail-highway crossing accidents on which the ICC made its report in January 1964. The reopening would be for "further hearing and reconsideration based upon an updated record," and FHA would participate with FRA "as appropriate." ■

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demands the TOUGHEST
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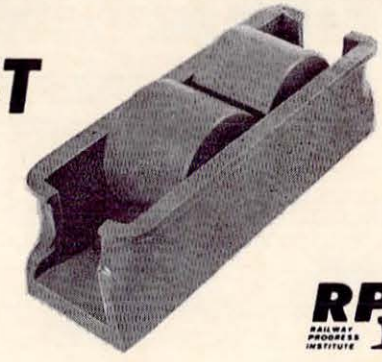

RPI RAILWAY PROGRESS INSTITUTE

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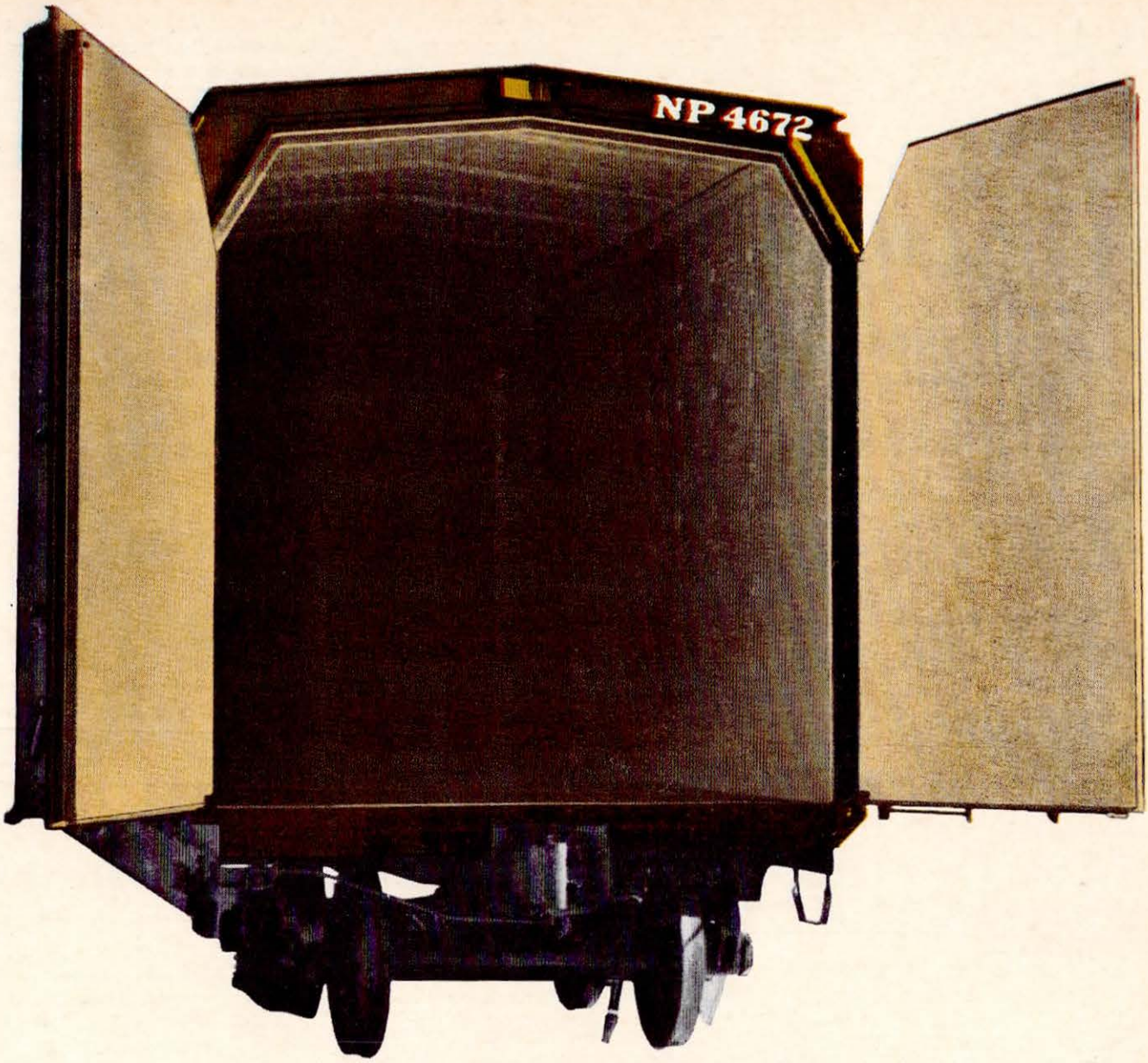

International Steel presents another innovation from its Railway Division's *Product Development Center:*

END DOORS in box cars

Disciplined design supervised the development of each element of this car—a new concept born of the renewed requirement for end doors in box cars. It has been designed and engineered under International's policy which dictates adherence—as closely as possible—to *multi*-purpose use, rather than the limited use of *special* purpose cars.

This meant that the design criteria imposed abnormal dynamic stress and maximum rigidity in both vertical and horizontal sections with a minimum of weight.

Structural rigidity has been engineered into the frame, supporting corner posts and header panel as well as door sections. Welding has been used throughout.

*"still **10** years ahead in functional design"*

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EVANSVILLE, INDIANA 47707

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ICC will act fast on rate-hike proposals

The railroad petitions for authority to increase freight rates will get expedited handling at the ICC. These petitions, citing increased annual expense of $444 million, were filed by railroads in Eastern and Western territories on May 18, and by Southern territory roads on May 19.

The Commission promptly issued an order instituting an investigation (Ex Parte No. 256) of the proposals, and publishing a timetable which contemplates oral argument, and thus submission of the case for decision, in less than two months—on July 11.

The timetable contemplates no hearing before an interim report is issued. So the argument will be based on evidence submitted on the faster schedule afforded by verified-statement procedure. Such statements in support of the increases are due June 2. Opposition statements are due July 10, the day before the beginning of the oral arguments. There is a July 6 deadline for protests against the proposed increase, which can be unsworn statements. Meanwhile, however, the order does indicate that the Commission may follow through from the interim report to continue the investigation for the purpose of taking a longer look at some of the proposed increases.

With relatively few exceptions, the petition of the Eastern and Western roads proposes increases which could average over-all something like 3%. The petition of the Southern territory roads might be described generally as a list of exceptions to the eastern-western petition in the form of flag-outs and hold-downs. Flag-outs are notices of refusals to go along on proposed increases, and hold-downs are ceilings on accepted increases. A country-wide increase on the Eastern-Western basis would yield something like $300 million a year, but there was no immediate estimate as to how much this would be reduced by the Southern territory flag-outs and hold-downs.

The latter, for example, contemplate no increases on important rates on grain and cotton moving within Southern territory. Among other flag-outs would be the proposed increases on horse-collars and garbage. There are also hold-downs on various non-grain products of agriculture, on food such as meat packing-house products, poultry and dairy products, and on wool, hides and leather. The Eastern-Western petition calls generally for no-hold-down increases on these commodities ranging from ½ cent per 100 pounds where present rates do not exceed 10 cents to 3 cents on rates of 80 cents or more. The general proposal also calls for increases of 5% in class rates and LCL and 3% on piggyback traffic moving at rates published on bases other than cents-per-hundred-pounds. It also calls for increases in switching charges, and accessorial charges, which would be either flagged-out or held-down in the South.

The Southern petition said it was framed after careful study of the competitive situation. It explained: "The Southern railroads in recent years have moderate reductions on a selective basis, and this experience has clearly shown that selective reductions have improved not only the railroads' share of the transportation market but also the contribution to constant costs and overheads made by those commodities on which the rates were selectively reduced. Rate increases should be approached in the same way." ■

SAFETY FIRST on the rail with . . . The original butterfly-type CAR RERAILERS

There are some things that can't be improved upon. For instance, the original Johnson butterfly-type Car Rerailers

Made of cast steel (annealed), these Rerailers simply straddle the rail, need no spikes, clamps or fasteners, and are self-adjusting to different heights of rail. Resting on both front and rear of rail, they form a friction grip when in use. Important too, the load is distributed on the rail, not on one or two ties.

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INDUSTRIAL TRAFFIC

Robert D. Zoller has been named superintendent of railroad transportation, general services division, **U. S. Steel Corp.**, Gary, Ind., Steel Works. He succeeds **Herbert G. Wittman**, transferred to the Homestead, Pa. District Works.

R. W. Keiley, assistant to director of transportation, **Armco Steel Corp.**, Middletown, Ohio, retired May 1, after 41 years service.

Arthur Stavinga has been named general traffic manager, **General American Transportation Corp.**, Chicago. He will be responsible for the operation of the Corporate Traffic department.

John E. Gross, assistant general traffic manager, **Inland Steel Co.**, Chicago, has been appointed general traffic manager, succeeding **Elliott C. Youngberg**, who retires June 1.

Leo F. Quinn has been appointed manager of purchasing and traffic, **Toyad Corp.**, Latrobe, Pa.

John D. Friedlein, formerly Bestwall Gypsum division traffic supervisor, has been appointed gypsum traffic manager for **Georgia-Pacific Corp.**, at Paoli, Pa. Bestwall division head offices recently were consolidated with G-P headquarters.

Flake Willis has been named western division manager—traffic and transportation, **U.S. Plywood-Champion Papers Inc. A. Carlisle Knowlton** has been appointed director of traffic and transportation. U.S. Plywood and Champion Papers merged Feb. 28. Mr. Willis is president and treasurer, **McCloud River Railroad**, a U.S. Plywood subsidiary at McCloud, Calif. Mr. Knowlton was formerly director of corporate traffic for Champion Papers, Hamilton, Ohio.

Roger J. Frock has been named head of the Transportation Group, **A. T. Kearney & Co.**, New York Office. Mr. Frock has conducted studies for railroads, trucking companies, bus lines and steamship companies.

Kevin B. Doyle has been appointed coordinator of transportation, **Falconbridge Nickel Mines Ltd.**, Toronto, Ont., Can. Mr. Doyle was formerly assistant manager of distribution, Allied Chemical Canada, Limited, Montreal.

Richard L. Hiatt, assistant traffic manager, **Detroit Steel Corp.**, has been promoted to traffic manager, Portsmouth Division, Portsmouth, Ohio.

John J. Wenstrup has been appointed director of the newly formed distribution department, **Goodrich-Gulf Chemicals, Inc.**, Cleveland, Ohio. Mr. Wenstrup has been serving as both credit manager and general traffic manager for Goodrich-Gulf.

Donald L. Nann has been appointed distribution analyst, **American Sugar Co.**, New York. He will assist in the Customer Pallet Exchange program and work with the Financial Department in expanding use of computers for transportation cost control. **Michael C. Struffolino** has assumed the duties of district traffic manager, Brooklyn refinery. Mr. Struffolino was formerly supervisor, rates and routes, International Paper Co.

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R. M. Freeman
C&NW

George S. Paul
C&NW

William J. Dixon
Rock Island

Robert Jochner
SP

PEOPLE IN THE NEWS

ATLANTIC COAST LINE.—C. P. Wood, assistant freight traffic manager, Jacksonville, Fla., will retire June 2, after more than 43 years of railroad service.

BURLINGTON.—Roy S. Belander, assistant sales manager, Oakland, Calif., named sales manager, Salt Lake City, succeeding **Herman J. Walther,** retired.

CANADIAN NATIONAL.—H. G. Neale, mechanical assistant—car, Montreal, appointed assistant mechanical officer—car (freight), system, Montreal.

G. H. Workman, bridges and structures, engineer, Great Lakes Region, appointed assistant chief engineer—design and construction, system, Montreal.

B. Walkin, assistant engineer, office of chief engineer, Montreal, appointed assistant engineer—maintenance of way, St. Lawrence Region, Montreal, succeeding **J. G. Allan,** promoted.

T. E. Dolphin appointed to the new position of project manager—Welland Canal, Great Lakes Region, Toronto. Mr. Dolphin will be responsible for coordinating the revisions to the rail plant necessitated by the redevelopment of the Welland Canal. Abolished position of projects engineer, formerly held by Mr. Dolphin.

CHICAGO & NORTH WESTERN.—Richard M. Freeman elected vice president—law, effective July 1, to succeed **Jordan J. Hillman,** who becomes professor of law at **Northwestern University's School of Law.** Mr. Freeman is a partner in the Chicago law firm **Belnap, Spencer, Hardy & Freeman.**

George S. Paul, director of personnel development, **Southern,** elected vice-president—personnel, **C&NW,** effective June 1.

INTERSTATE COMMERCE COMMISSION.—Martin E. Foley appointed assistant managing director, Washington, D.C., succeeding **Ernest Weiss,** named executive director, National Transportation Safety Board, Department of Transportation. **N. Thomas Harris,** regional manager, ICC, Chicago, replaces Mr. Foley as assistant director, Bureau of Operations, ICC.

JERSEY CENTRAL.—Robert Frederickson appointed executive assistant to the trustees, Jersey City, N.J. **Edward T. Plunkett,** assistant comptroller, promoted to comptroller, succeeding Mr. Frederickson. **John W. Leppington,** assistant secretary and assistant treasurer, appointed secretary and treasurer, succeeding **Robert E. Teston,** who retired April 30, after 43 years with the road. **Frank V. Petraitis,** real estate transfer agent, succeeds Mr. Leppington.

Joseph R. Walsh, superintendent, Pennsylvania division, Allentown, Pa., appointed to the new position of general superintendent, Jersey City. **George C. Wilms, Jr.,** division superintendent, Jersey City, reassinged as superintendent with jurisdiction over all territory between Aldene, N.J., and Scranton and all territory south of Woodbridge Junction (near Perth Amboy, N.J.). **John H. Moore** appointed terminal superintendent, with jurisdiction over all territory east of Aldene and north of Woodbridge Junction. **Herbert G. E. Messner,** trainmaster, Allentown, appointed assistant superintendent there.

Berton E. Kernahan, traveling freight agent, St. Louis, appointed general agent there, succeeding **Clifford H. McNab,** retired.

LEHIGH & HUDSON RIVER.—W. Gifford Moore appointed superintendent, Warwick, N.Y.

LOUISVILLE & NASHVILLE—Glen R. Neuharth, freight traffic agent, Kansas City, named district freight agent, Seattle, succeeding **Charles A. Nick** named general agent, Houston (RA, May 15, p. 36).

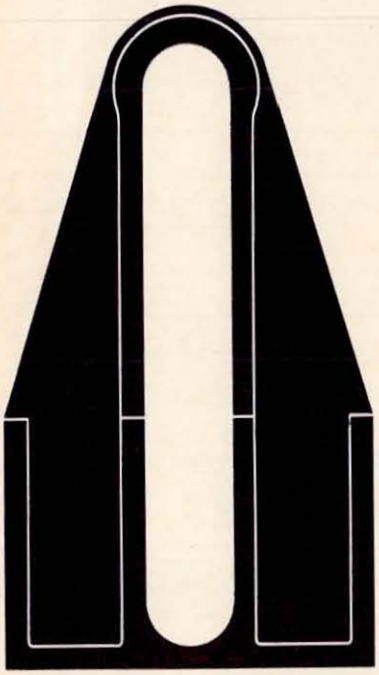
MERCHANTS DESPATCH TRANSPORTATION CORP.—Harry C. Beaman, Jr., vice president and general attorney, Chicago, elected president, effective July 1, succeeding **Homer L. Campbell,** who is retiring after 43 years with the company.

NEW YORK CENTRAL—James E. Martin, director of organization development, New York, appointed district transportation superintendent, Western District, Cleveland, Ohio, succeeding **Jeremy Taylor,** named general manager, Southern District, Indianapolis.

NEW YORK CITY TRANS'T AUTHORITY—Thomas D. Stewart, Jr., train dispatcher, promoted to trainmaster.

NORFOLK & WESTERN.—Thomas H. Desnoyers appointed director—marketing, Roanoke, Va. Mr. Desnoyers was formerly director—marketing and research, **Milwaukee,** at Chicago.

E. W. Nixon, general manager, Pocahontas region, appointed to the newly created position of general manager—special equipment, Roanoke, reporting jointly to the vice presidents of traffic and operations. **C. V. Holton,** manager transportation, Atlantic and Pocahontas regions, appointed vice president and general manager, **Norfolk Franklin & Danville,** N&W subsidiary, at Suffolk, Va., succeeding **M. E. Bowman,** who replaces Mr.



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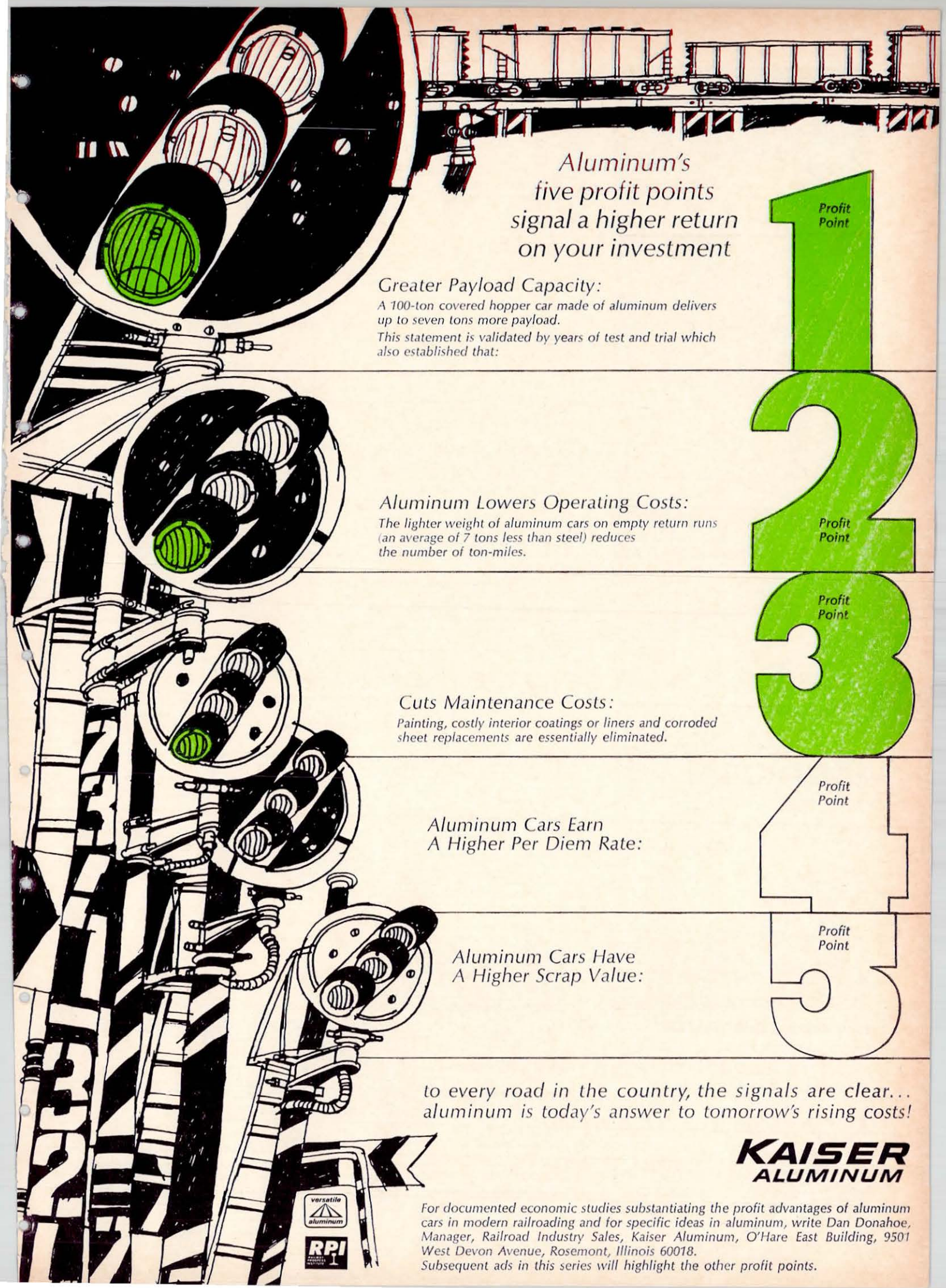

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A 100-ton covered hopper car made of aluminum delivers up to seven tons more payload.

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The lighter weight of aluminum cars on empty return runs (an average of 7 tons less than steel) reduces the number of ton-miles.

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Subsequent ads in this series will highlight the other profit points.

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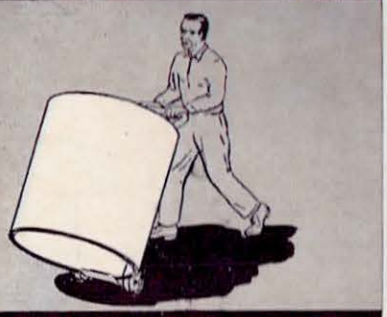
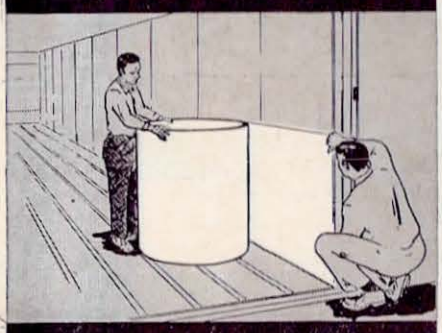


SCUFF PLATE



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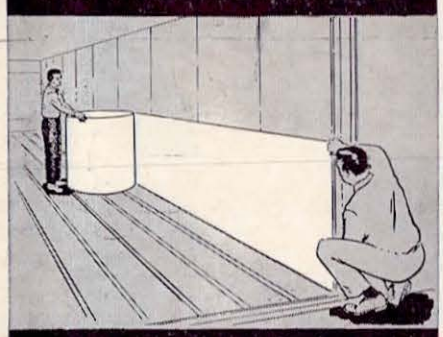
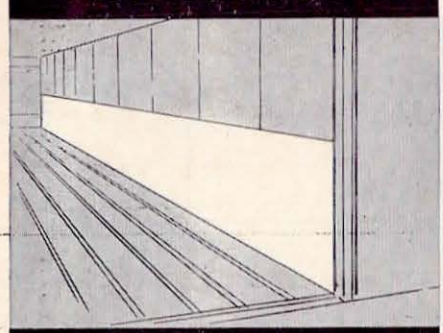


THE LENGTH



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Nixon at Bluefield W.Va. **William J. Watson, Jr.**, assistant manager transportation, named assistant to the general manager transportation, succeeding **Louis M. Newton**, who replaces Mr. Holton. **T. C. Moore**, road foreman of engines, named assistant superintendent, Norfolk division, Crewe, Va., succeeding **L. F. Popp**, promoted to assistant to general manager transportation.

W. L. Knipe, sales manager, Boston, Mass., retires May 31, after 40 years of railroad service.

PENNSYLVANIA.—W. G. S. Savage, Jr., manager of passenger rates, Philadelphia, appointed acting general manager of passenger sales.

ROCK ISLAND.—William J. Dixon, assistant to the president, elected vice president, executive department.

William H. Beals, division engineer, Chicago, appointed assistant engineer of maintenance—track—north, with headquarters at Des Moines, Iowa. He will have supervision of roadway and track in the northern half of the company's system.

ST. JOHNSBURY & LAMOILLE COUNTY.—L. D. Magnan appointed general manager, Morrisville, Vt. **Floyd T. Dyer** named sales manager, Portland, Me. **Robert Vincelette** appointed assistant general freight agent, Morrisville.

SOUTHERN.—Wilmer F. Leach, vice-president—sales, **Central of Georgia**, Washington, D.C., appointed assistant vice president—sales, **Southern**, Washington.

William C. Bythewood, manager, sales and rail-highway (administrative), CofG, Washington, appointed sales data coordinator, Southern, Washington.

SOUTHERN PACIFIC.—Robert M. Jochner, assistant passenger traffic manager, promoted to passenger traffic manager, San Francisco, succeeding **L. Gordon Crocket**, who retired April 30, after a 42 year railroad career. **Lewis H. Monk**, supervisor of car service, succeeds Mr. Jochner as assistant passenger traffic manager.

E. J. Hannan appointed assistant to general auditor, succeeding **Leo H. Burke**, who retired April 30 after almost 47 years with the SP.

UNION.—Paul C. Magill, general freight agent, Pittsburgh, appointed traffic manager. **James P. Keeney, Jr.**, named assistant traffic manager. Mr. Keeney was formerly manager of sales, **Duluth, Missabe & Iron Range** at Duluth, Minn. **William D. Shaw**, assistant general freight agent, named assistant to traffic manager.

R. K. McKenzie
Morton Mfg.

F. E. Leib
Copperweld

SUPPLY TRADE

Robert K. McKenzie has been elected a vice president of **Morton Manufacturing Co.** He has been assigned responsibility for all the company's engineering functions and will continue to supervise sales of the Transportation Division.

F. E. Leib has been promoted to executive vice president in charge of the Wire and Cable and Flexo Wire Divisions of **Copperweld Steel Co.**

Robert C. Keenehan has been appointed Railway Car Division controller, **Evans Products Co.** He was formerly staff assistant to the Transportation Equipment Group controller.

George F. McGowan, Magor Railcar Division, Fruehauf Corp., has resigned to become senior railroad project engineer, LaPaz, Bolivia, in a study of **Bolivian National Railways** for Daniel, Mann, Johnson & Mendenhal, Los Angeles.

Robert E. Waite has been appointed a sales representative, railway sales office, **National Castings Division, Midland-Ross Corp.**, Chicago. Mr. Waite joined National Castings as a sales trainee in marketing services.

David M. Buckingham has been appointed a sales representative, **Scullin Steel Co.**, Philadelphia.

D. S. Koporec has been appointed resident sales representative, Birmingham, Ala., for the **L. B. Foster Co.** Atlanta region. He was formerly Alabama sales representative in the Atlanta district office.

(Continued on page 90)

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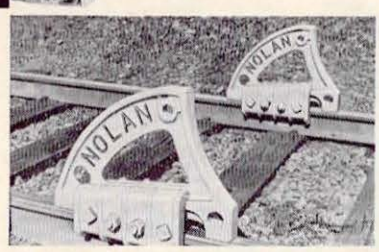
If you don't have it, write us . . . 19 pages of railway equipment.

This rugged CAR STOP STOPS 'EM

Model CS-50



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M-62 Twin

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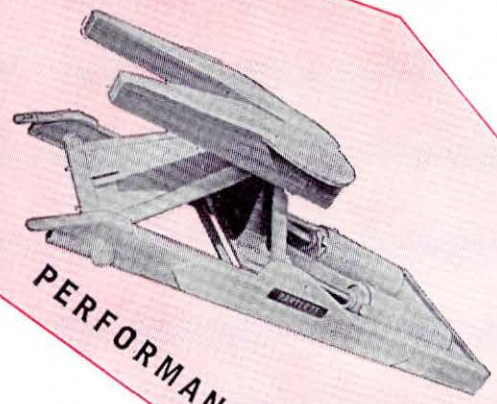

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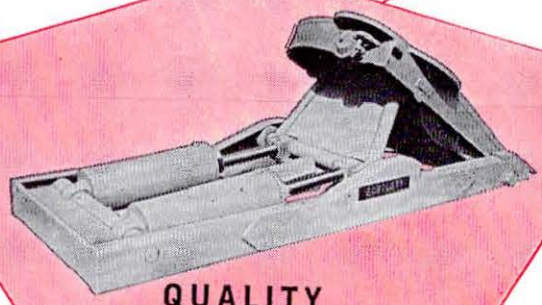

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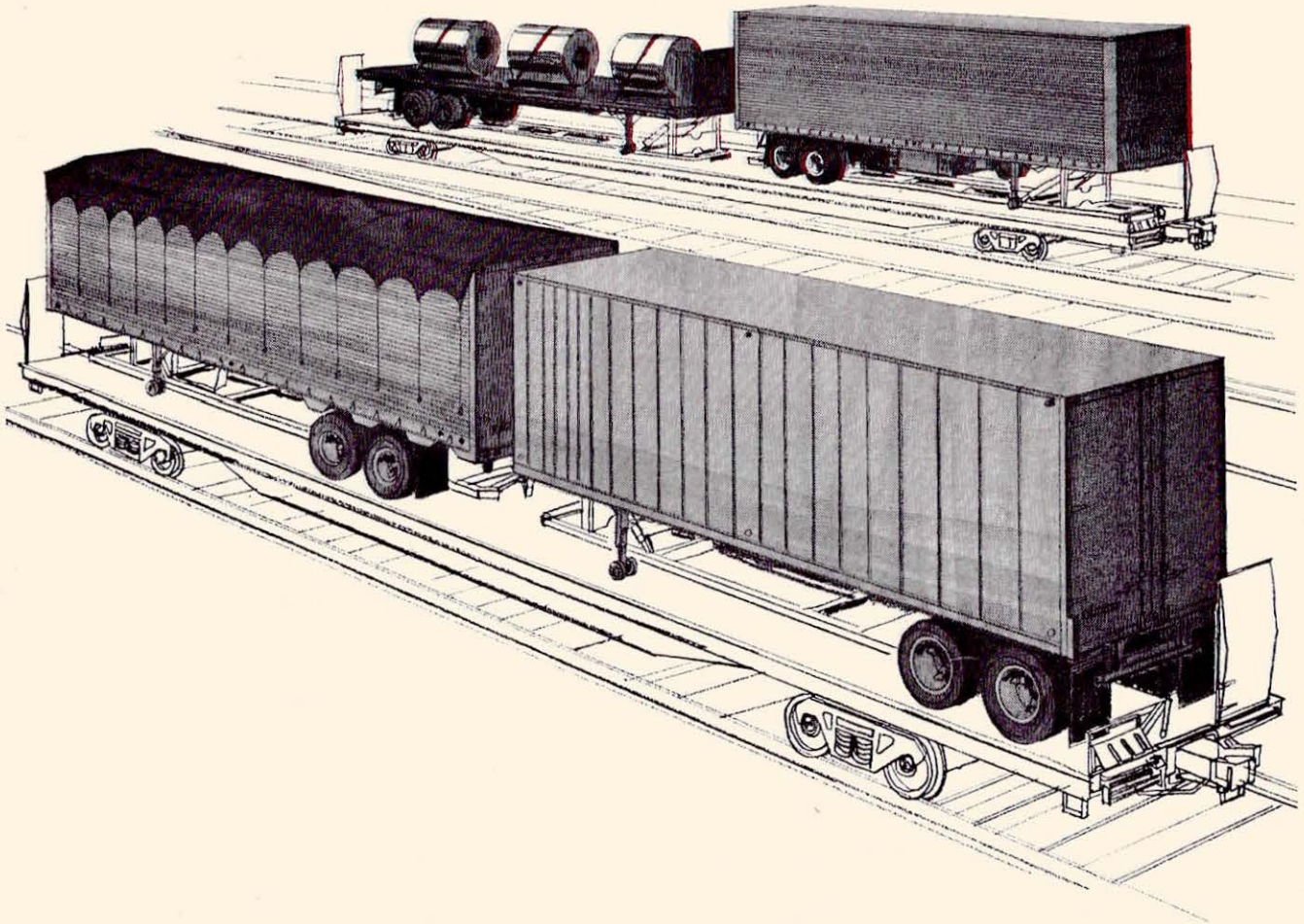

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To make your entire fleet a piggyback fleet—at no extra cost—standardize on Fruehauf . . . Vans, Platforms, Reefers, Open Tops. Get details from your local Fruehauf representative. **Fruehauf Division, Fruehauf Corporation, 10942 Harper Avenue, Detroit, Michigan 48232.**

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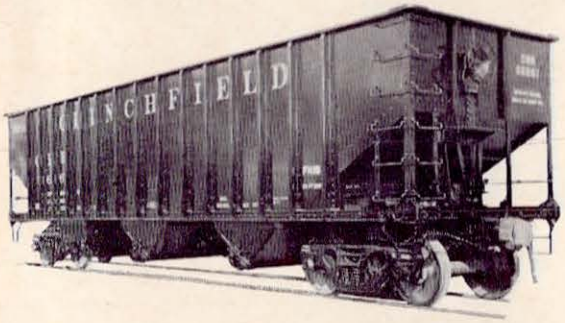
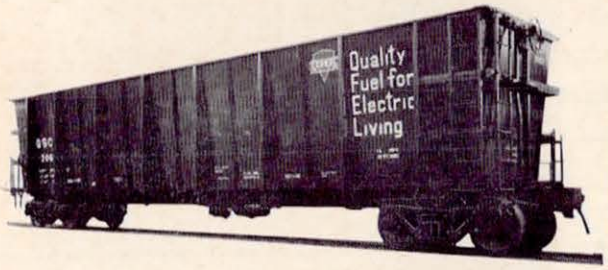
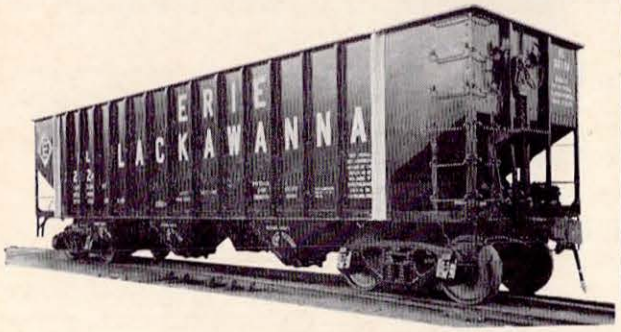
By 1975 an additional 80,000,000 tons of coal will move by rail to power companies annually.

Will your car fleet be ready for the job?







That's the forecast. Even with unit trains and fast turn arounds many more cars will be needed to handle that traffic. Coal hauling railroads are already considering this in their planning. The variety of cars envisioned is reflected in recent Greenville designs:

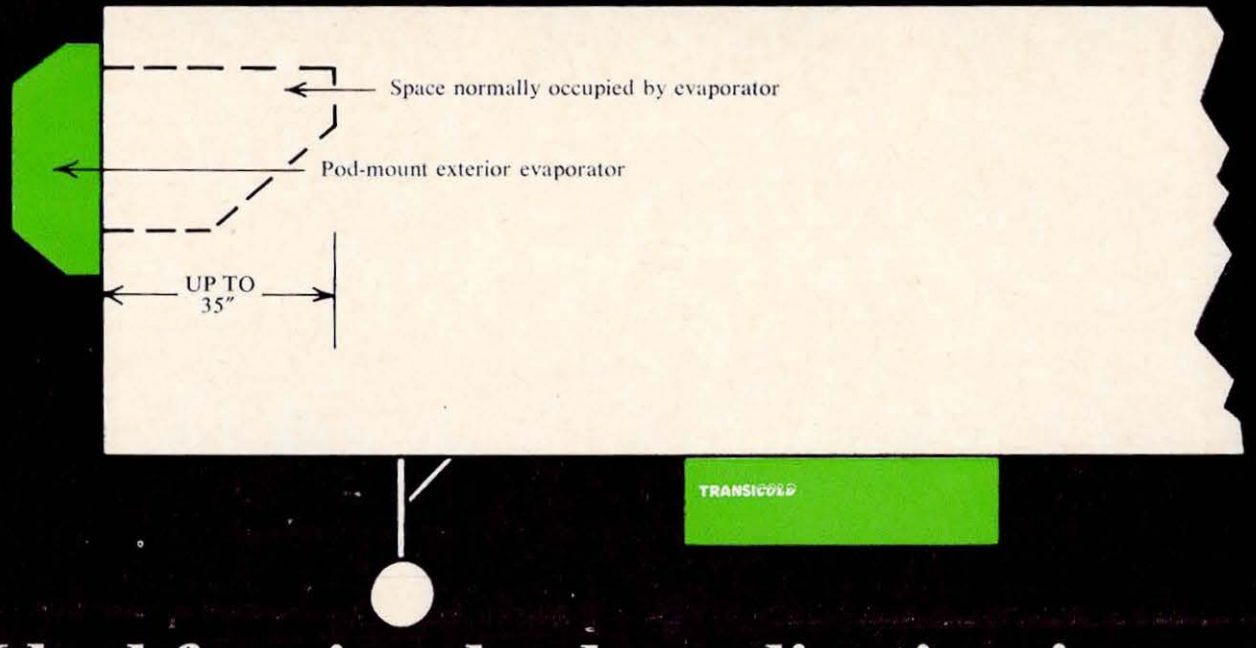
- ☐ **New, high-sided gondolas, some with rotary couplers for unit train service.**
- ☐ **Triple and quadruple cross hoppers for unit trains.**
- ☐ **Bottom dump equipped with hydraulic controlled, longitudinal doors.**
- ☐ **Conventional triple hoppers for general service.**

With new coal fields opening up, more railroads than ever will be involved with this major hauling problem. If your road is one of them, it's time you talked with Greenville. Regardless of your needs, Greenville has the cars for the job. Let's get together and discuss them.

GREENVILLE **STEEL CAR COMPANY**
Subsidiary of Pittsburgh Forgings Company
GREENVILLE, PENNSYLVANIA

Circle 43 on reader service card

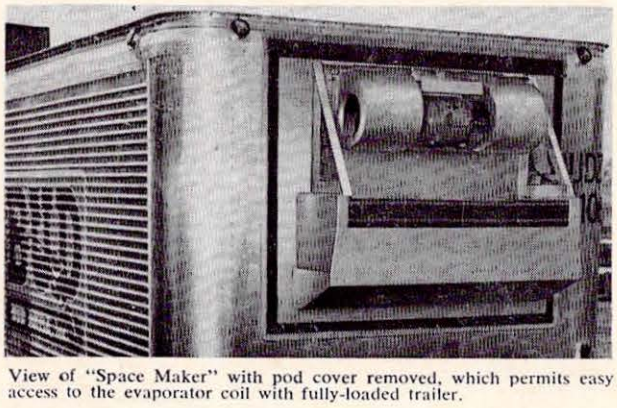
Transicold has moved the evaporator outside!



Ideal for piggyback applications!

Another Transicold Exclusive

Only Transicold manufactures the exterior pod-mount "Space Maker" evaporator to give you extra cargo space, reduce claims, and eliminate hand-stacking around conventional inside evaporators. Designed for use with undermount models, Transicold has moved the entire evaporator assembly outside—evaporator coil, motor, and blowers...even the defrost controls and drain-pan heater. There's nothing left inside that could require disturbing loaded cargo.



View of "Space Maker" with pod cover removed, which permits easy access to the evaporator coil with fully-loaded trailer.

One of the largest reefer operators buys Transicold for two *exclusive* features: the Pod Mount "Space Maker" evaporator...and Transicold compressor "Unloaders," which virtually eliminate *top freezing* and dehydration and cut engine wear by reducing surge between heating and cooling cycles (proved under exacting tests).

TRANSICOLD SERVICE—WHEREVER TRAILERS TRAVEL

1100 South Taylor Avenue, Montebello, California

TRANSICOLD CORPORATION

Circle 44 on reader service card

"I married a Humble Railroad Man."

It takes the large economy size to clean up after a man who *likes* to feel a greasy gear with his fingers. Our man was checking traction motor gears that weren't doing too well on a competing grease. And he didn't stop with the gear teeth.

He picked up some of the throw-out and worked it between his fingers.

He poked loose a bit of the tarry deposit where grease had oxidized in the top of the gear case and sent it to our labs.

He did it in locomotive shops from one end of the line to the other, because he knew no two locomotives are exactly alike.

And when he got through each day, he was a mess.

But he had the facts the railroad wanted to hear — because he'd seen with the eyes and felt with the fingers of a man who got his start in the railroad shops.

Humble now has the traction motor gear grease contract for every locomotive on that line. Meanwhile, our man's wife has set some sort of record in buying detergents.

Call us any time you need the help of a railroad man who's not afraid of getting a little grease on his elbows — or giving you a lot of elbow grease.

HUMBLE OIL & REFINING COMPANY . . . THE PEOPLE WHO "PUT A TIGER IN YOUR TANK."

ESSO

The Santa Fe Idea:

C O F C. It's a new symbol for railroad freight service. It means "containers-on-flat-cars." It's one more service Santa Fe provides for handling freight.

C O F C offers advantages for more efficient and economic handling of certain types of freight. It also has special advantages for intermodal transportation from highway, to rail, to boat.

Santa Fe was one of the first railroads to use containers for the movement of mail on transcontinental passenger trains. We have been doing this for the past six years in cooperation with the U.S. Post Office Department. We are also moving export and import freight in containers to and from Texas and California ports.

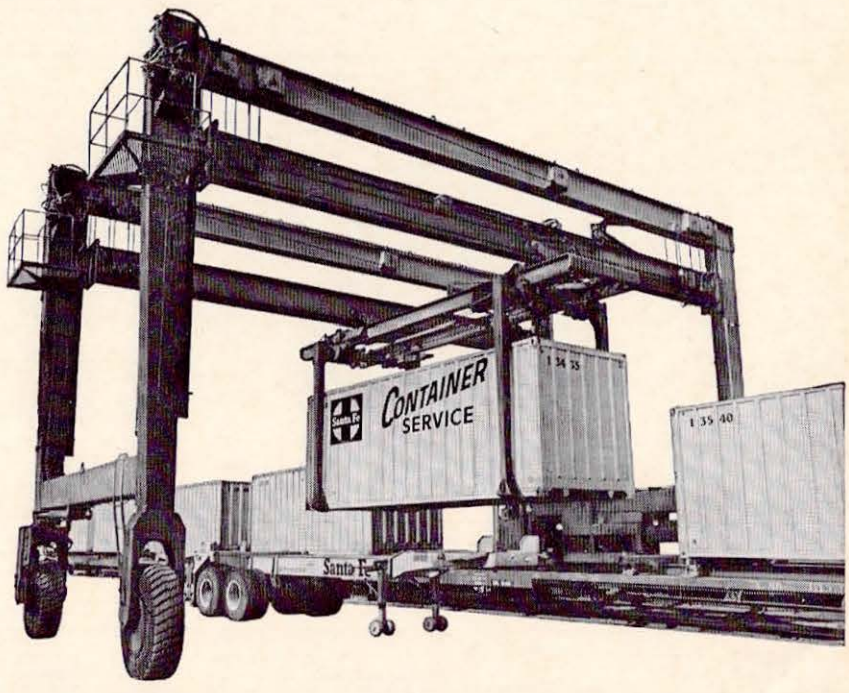
C O F C is one of the many ideas Santa Fe is studying and implementing to fit our freight operations to your changing requirements.

It's why we say Santa Fe is always on the move toward a better way.

Santa Fe

Containers for your load?

The Santa Fe Idea: We'll carry yours...or furnish them for you to use.



Circle 59 on reader service card

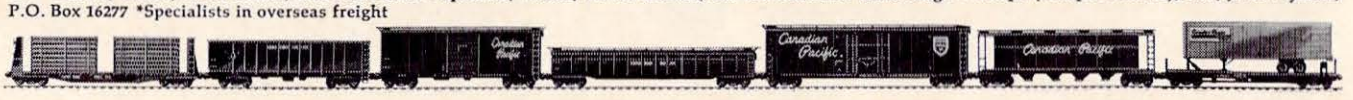
What's a railway doing with a fleet of diesel trucks?

We're providing our customers with faster, more efficient freight service to, from and through Canada and overseas. But that's not all. Canadian Pacific's unique freight service combines trains, cargo jets, trucks and ships into one integrated freight system with automated control by jet-age telecommunications. This one-carrier, door-to-door service assures you of careful, speedy handling. Could mean less paperwork, less trouble, less worry and higher profits. Do you have a shipping problem? Let us custom-fit a solution for you with our unique service. Call one of Canadian Pacific's freight traffic specialists. Your competition will.

Ship **Canadian Pacific**

Trains/Trucks/Ships/Planes/Hotels/Telecommunications
WORLD'S MOST COMPLETE TRANSPORTATION SYSTEM

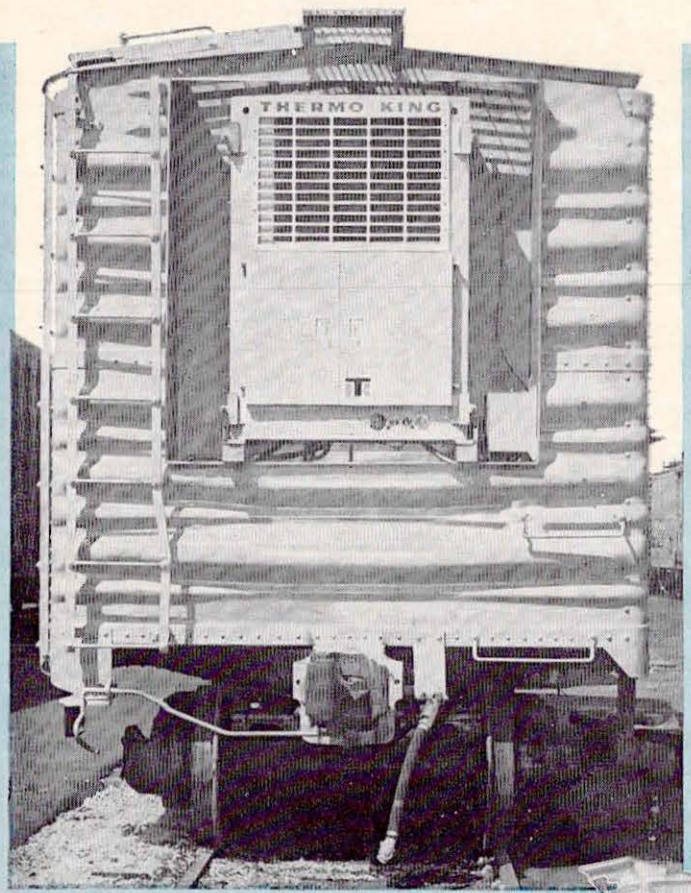
Bangor (Brewer), Me., W. M. Campbell, P.O. Box 163 • **Boston, Mass.,** P. G. Watts, 150 Causeway St. • **Buffalo, N. Y.,** P. Coleman, 17 Court St. • **Chicago, Ill.,** W. L. Epperson, 2040 Bd. of Trade Bldg.; R. A. Hasenstab, 2040 Bd. of Trade Bldg.; A. R. Miller*, 2040 Bd. of Trade Bldg.; C. A. MacKenzie, 2040 Bd. of Trade Bldg. • **Cincinnati, Ohio,** F. A. Dykstra, 49 East Fourth St. • **Cleveland, Ohio,** D. R. Habetler, 614 Superior Ave. • **Dallas, Texas,** A. E. Gorman, 1509 Main St. • **Detroit, Mich.,** W. W. Schader, 660 Woodward Ave.; L. J. Nieckarz, 660 Woodward Ave.; R. L. Purdy, 2243 First Nat'l Bldg. • **Hartford, Conn.,** J. A. Sullivan, 410 Asylum St. • **Houston, Texas,** J. F. Malone • **Indianapolis, Ind.,** L. F. McMahon, 115 N. Pennsylvania St. • **Kansas City, Mo.,** R. J. Schmitt, 6 East 11th St. • **Los Angeles, Calif.,** J. H. Aylwin, 459 Pacific Electric Bldg. • **Memphis, Tenn.,** P. O. Tobiasson, P.O. Box 17241 • **Milwaukee, Wis.,** C. Johnson, 1312 Majestic Bldg. • **Minneapolis, Minn.,** O. C. Ulmer, 1412 Soo Line Bldg. • **Mobile, Ala.,** D. R. Clark, 211 I.B.M. Bldg. • **New York, N. Y.,** W. G. Wiley, 581 Fifth Ave.; J. P. Yafcak*, 581 Fifth Ave.; A. A. Hertle, 581 Fifth Ave. • **Omaha, Neb.,** J. J. O'Keefe, 1319 Farnam St. • **Philadelphia, Pa.,** C. C. Seiss, 1819 John F. Kennedy Blvd. • **Pittsburgh, Pa.,** A. Nemenz, 436 Seventh Ave. • **Portland, Me.,** T. P. Maloney, 232 Saint John St. • **Portland, Ore.,** G. W. Roscoe, 621 S.W. Morrison St. • **Presque Isle, Me.,** D. W. Spicer, 324 Main St. • **St. Louis, Mo.,** J. C. Waddell, 611 Olive St. • **San Francisco, Calif.,** M. G. Anderson, 681 Market St. • **Seattle, Wash.,** A. G. Bower, 1323 Fifth Ave. • **Spokane, Wash.,** W. D. Reeves, 730-731 Old Nat'l Bank Bldg. • **Tampa (Temple Terrace), Fla.,** J. R. Wyman, P.O. Box 16277 *Specialists in overseas freight



Circle 46 on reader service card

THERMORATED*

THERMO KING Model NWD INCREASES PAYLOAD SPACE 15% IN ICE BUNKER CAR CONVERSION



- Increases interior length from 33′ to 38′ to add 274 extra cubic feet in 40′ ice cars.
- A one-piece factory-tested unit, ready to run when shipped.
- Unit is simple to install and easy to service.
- Powered by rugged, dependable Mercedes-Benz diesel.
- Offers full range temperature control from −20°F. to 80°F.
- All components specially built for roughest transport conditions.
- Electric power standby option is available.
- A super capacity system that will easily handle 50′ cars as well.

Up front mounting of NWD system offers operational advantages. Condenser is cooled by unobstructed flow of clean air. Unit occupies no floor space, and only a few feet of cargo space. It is economical to operate under all types of transport conditions.

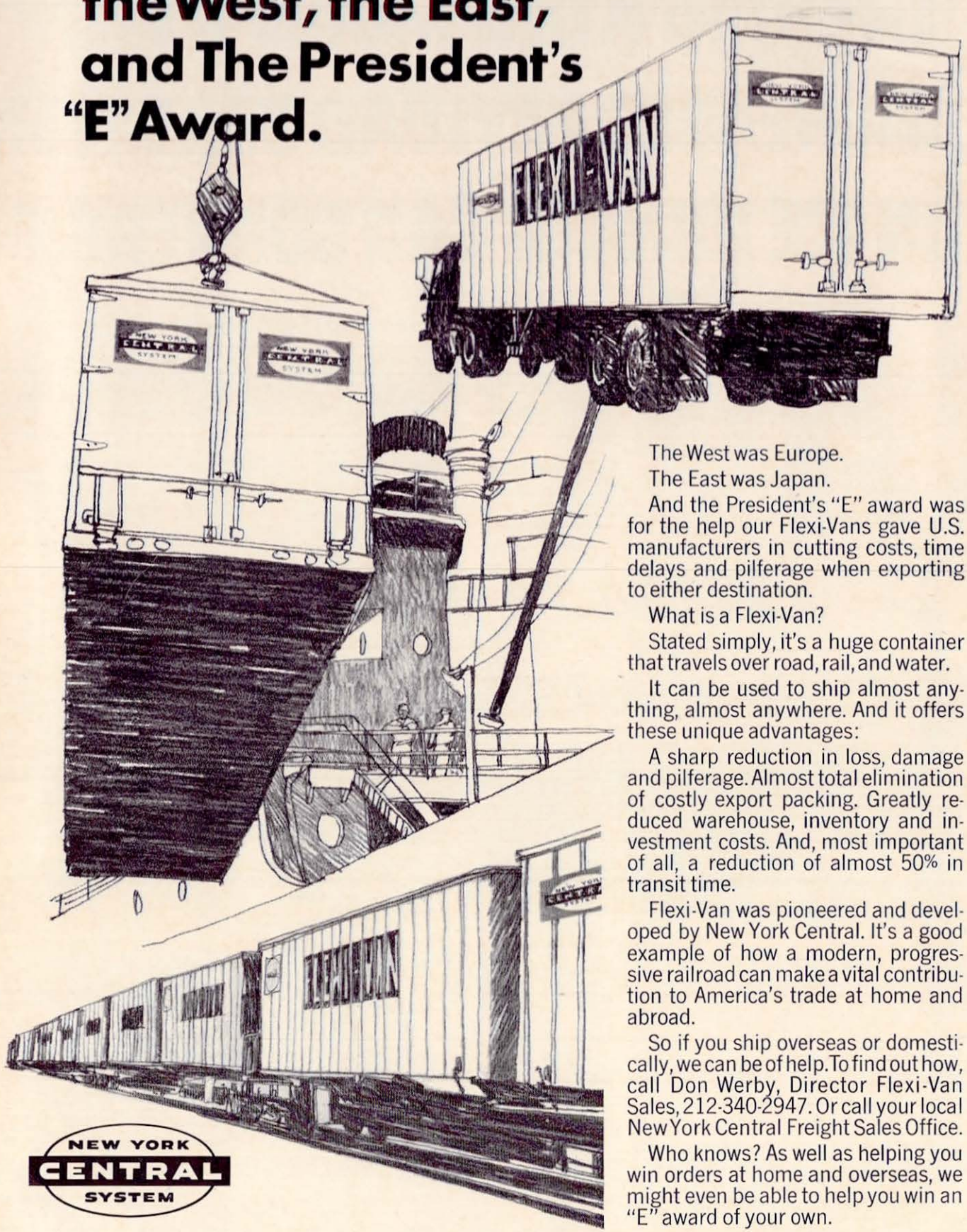
World Leader in Transport Refrigeration

THERMO KING
corporation
Minneapolis, Minn. 55420

Only THERMO KINGS are
***THERMORATED**

- **VERIFIED PERFORMANCE**—Rated capacity with assured reliability
- **JOB ENGINEERED**—Developed for a specific requirement
- **TOTALLY "BUILT-FOR-TRANSPORT"**—Custom components with rugged durability
- **SERVICE/PARTS PROTECTION**—Factory authorized dealers everywhere

The container that won the West, the East, and The President's "E" Award.



The West was Europe.

The East was Japan.

And the President's "E" award was for the help our Flexi-Vans gave U.S. manufacturers in cutting costs, time delays and pilferage when exporting to either destination.

What is a Flexi-Van?

Stated simply, it's a huge container that travels over road, rail, and water.

It can be used to ship almost anything, almost anywhere. And it offers these unique advantages:

A sharp reduction in loss, damage and pilferage. Almost total elimination of costly export packing. Greatly reduced warehouse, inventory and investment costs. And, most important of all, a reduction of almost 50% in transit time.

Flexi-Van was pioneered and developed by New York Central. It's a good example of how a modern, progressive railroad can make a vital contribution to America's trade at home and abroad.

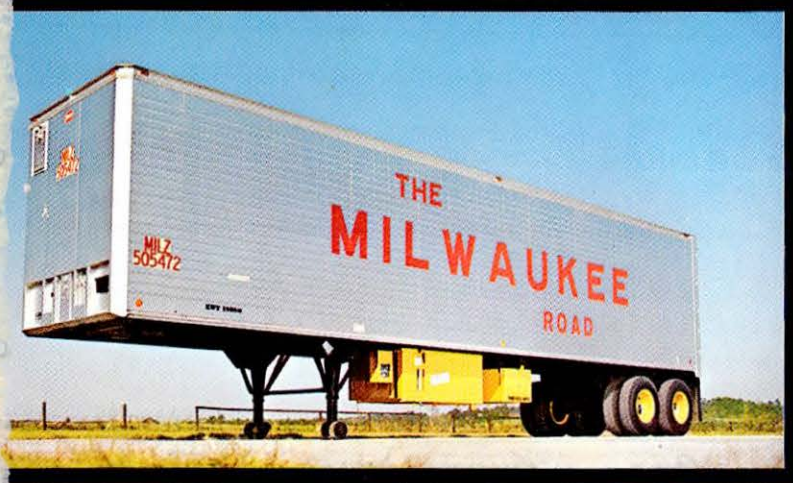
So if you ship overseas or domestically, we can be of help. To find out how, call Don Werby, Director Flexi-Van Sales, 212-340-2947. Or call your local New York Central Freight Sales Office.

Who knows? As well as helping you win orders at home and overseas, we might even be able to help you win an "E" award of your own.

NEW YORK CENTRAL SYSTEM

Circle 48 on reader service card

Rugged and Right for Piggyback Service



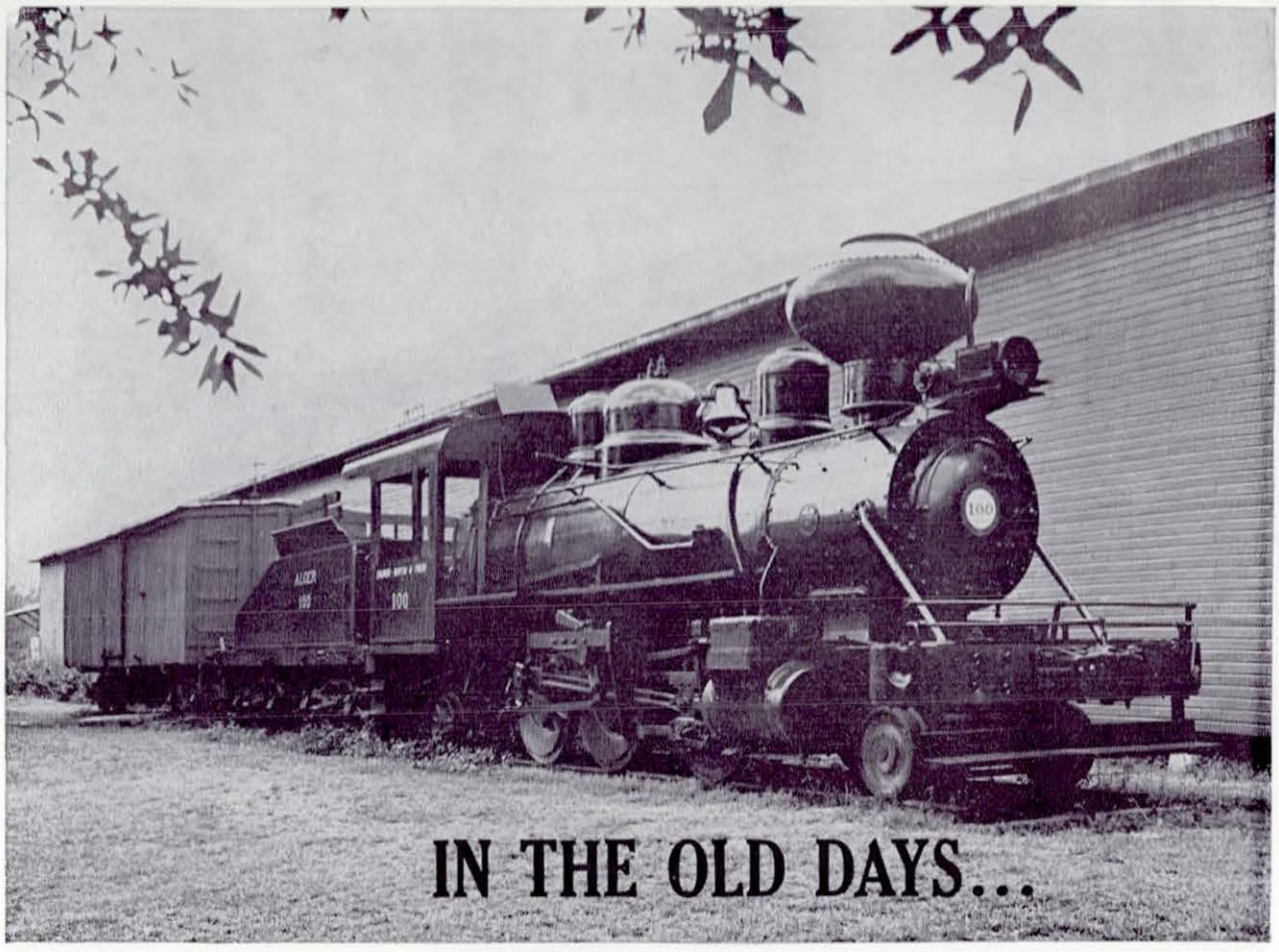
Write for brochure

describing our
products and facilities

DORSEY TRAILERS

DORSEY TRAILERS
ELBA, ALABAMA

A Subsidiary of The Dorsey Corporation



THINGS WERE NOT BETTER

Maybe the memories of them are, but not the reality. Take this old steam engine at the Alger-Sullivan Company in Century, Florida. It evokes good memories but could never pull the load like a modern diesel. Perhaps it's just as well, because old-fashioned railcar flooring couldn't carry the load modern Alger-Deck can—not as well, as far, or for as little cost.

Made of kiln-dried longleaf yellow pine laminated in edge-grain fashion and then pressure-treated, Alger-Deck is the most modern and the best railcar decking you can buy.

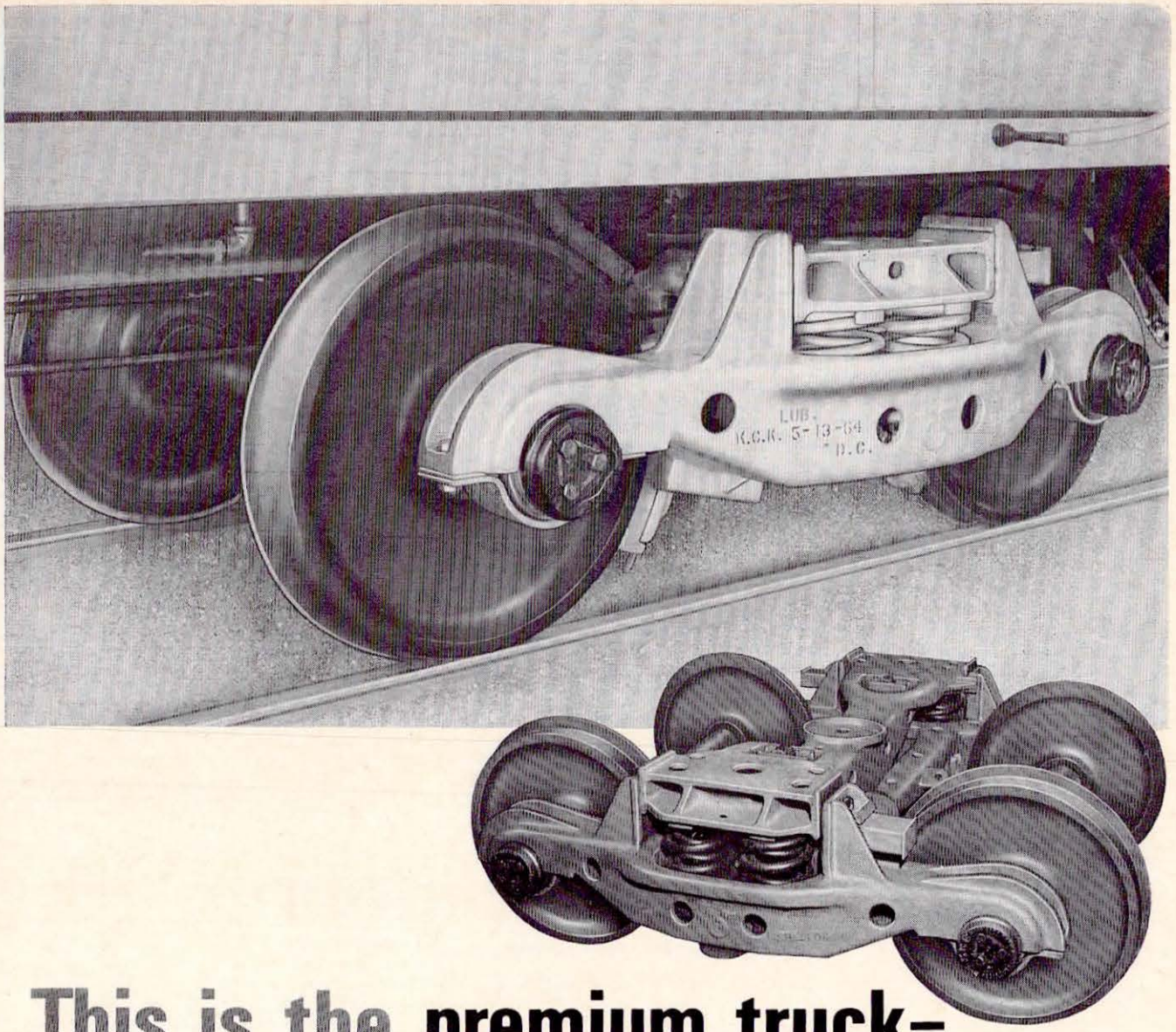
Stronger per pound than steel, economical, durable and nailable . . . these are the advantages of Alger-Deck. Add that it is pressure-treated with the new Cellon® process by Koppers—an odorless, dry, non-toxic treatment—and you have railcar decking that will mean long-run profitable operations.

ALGER-DECK

Another outstanding product from Alger-Sullivan Company, Century, Florida

®Koppers Company, Inc., trademark

Circle 50 on reader service card



This is the premium truck– the Rockwell Express Truck

. . . the best truck buy on the market!

■ It's no accident that the Rockwell Express Truck provides mile after mile of maintenance-free operation – the premium truck is designed and built to do just that!

With a minimum of wear points and a tram feature that is setting records for low wheel wear, the Rockwell Truck has a special significance for those who consider new equipment in terms of return on investment.

We know it's hard to believe, but with the lowest maintenance costs in the industry comes a new quality of ride performance.

Doesn't your premium car fleet deserve the premium truck – the Rockwell Express Truck?

Write . . . wire . . . or phone

Rockwell
MANUFACTURING COMPANY
LFM-ATCHISON DIVISION • Atchison, Kansas 66002
P.O. Box 188 • Phone: (AC 913) 367-2121

MEMBER RPI

1665-3

Circle 51 on reader service card

(Continued from page 76)

Keith P. Bingham has been appointed area administrator, **GRS International**. Mr. Bingham will administer sales and marketing efforts in Europe, Middle East and Africa. Prior to joining GRS International, Mr. Bingham served with the **Bessemer & Lake Erie.**

On May 1, **Alco Products, Inc.,** realigned the field sales organization, locomotive and engine products division. **Ralph M. Darrin, Jr.,** formerly Northeastern manager, has been named manager, Eastern region (former Northeastern and Southeastern regions) at New York. **James L. Layton,** formerly manager, Pacific area, has been appointed manager, Western-Pacific region (former Central and Pacific regions) at Chicago. **Carl A. Gandy** will manager the Southwestern region, at St. Louis.

T. C. Hammer has been appointed vice president, **Camel Sales Co. T. C. Soddy, L. N. Shelley** and **C. S. Jordan** have been named assistant vice presidents. Mr. Soddy was also named vice president, **Camel Co., Ltd.**

Joseph B. Dowling has been appointed vice president of sales, **New Haven Truck Rental, Inc.,** New Haven, Conn. Mr. Dowling has been national sales manager—railroad leasing, **Berman Leasing Co.,** Pennsburg, Pa., for the past five years. He previously had been coordinator of piggyback transportation for the **New Haven,** which road he served for about 23 years.

Felix Baker has been appointed district manager, **L. B. Foster Co.,** Seattle, Wash., and Vancouver, B. C., Canada. He was formerly Northwest area sales manager, San Francisco, and product manager, steel sheet piling.

J. V. Tommaney has been appointed manager, Latin American Division, Houston, Tex.

Page & Page, division of **Dura Corp.,** Portland, Ore., has announced purchase of manufacturing and marketing rights plus complete inventory of Carco Logging Bunks from **Pacific Car & Foundry.**

William A. Barnes has been appointed product sales manager for aluminum mill products, Metal Products Department, **Dow Chemical Co.,** Midland, Mich. His responsibilities will include sales to the railroad industry. Mr. Barnes has been marketing manager for the railroad industry since 1964.

Charles Milnar has been appointed assistant chief engineer, locomotive cranes, **American Hoist & Derrick Co.,** St. Paul, Minn. He was formerly engineer in charge of locomotive cranes.

James L. Montgomery has been named director of engineering and **Raymond A. Engstrom,** chief engineer, **American Hoist & Derrick Co.,** St. Paul, Minn. They were both formerly assistant chief engineers.

J. J. Hickey had been appointed vice president—sales, **Magnus Metal Corp.,** Chicago. Mr. Hickey was formerly vice president—Eastern sales, New York. **L.J. Gruber,** vice president, Chicago, has resigned.

John A. Stueven has been appointed sales representative, **Cleveland Frog & Crossing Co.,** working out of the **Pettibone Mulliken Corp.** offices, Empire State Bldg., New York. Mr. Stueven will call on Class I railroads.

W. W. Parks has been elected a vice president of **Vapor Corp.** He will continue as general manager of the Railroad and Transit Division.

Robert P. Radwill has been named manager-product engineering, **American Steel Foundries.** He was mechancial engineer in charge of ASF's analytical section.

Ken J. Conway and **John W. Bradbury** have been named sales engineers, **Camel Sales Co.** Mr. Conway was formerly with **Heywood, Wakefield Co.,** and Mr. Bradbury was with the **National Casting Division, Midland-Ross Corp.**

Robert J. Hebden has been appointed manager of engineering, **Freight Car division, General American Transportation Corp.** He was assistant to the manger of the division plant at East Chicago, Ind.

OBITUARY

John A. Amos, president, **Equipment Research Corp.,** died April 21 in Mercy Hospital, Chicago.

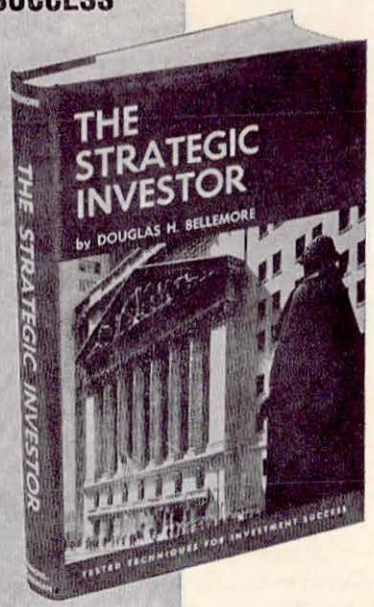
Alan Standish Dana, 74, consulting engineer, **Kerite Co.,** died April 29. Mr. Dana was chief engineer for Kerite for 42 years.

Raymond E. Kovarik, vice president, **Durox Equipment Co.,** Cleveland, Ohio, died May 4 in an airline accident.

John J. Roche, 67, retired corporate secretary, **Milwaukee,** died May 5 at his home in Elmhurst, Ill.

Ward H. Thickett, vice president, **New York Central Transport Co.,** died April 27.

TESTED TECHNIQUES FOR INVESTMENT SUCCESS



THE STRATEGIC INVESTOR

by Douglas H. Bellemore, Registered Investment Adviser

A step-by-step guide containing a host of plans aimed at achieving specific investment goals. The author's *conservative* investment plans aims at achieving $100,000 by retirement age. This plan requires only an investment of $500 a year during the first 10 year period—if the investor starts at 30. There are clear, easy-to-understand programs for other age groups and many varied investment goals. For the aggressive investor, willing to devote the necessary time and effort, there's an investment plan aimed at a goal of $200,000 (and more depending on funds invested) by retirement time. Another example shows how an investment of $1,000 a year from ages 30 to 65 (with reinvestment of dividends) could result in the accumulation of about $236,000.

You can gain a professional level of insight on such vital topics as—• Types of investment objectives • Six traits of the successful investor • Lessons of financial history that you must know • Pitfalls to avoid—investment risks • Best information sources & how to use them • Understanding security analysis • Pros and cons of investment advice • Your individual overall program • Basic portfolio policies for successful investing.

MAIL THIS COUPON TO ▶

Simmons-Boardman Books, Dept. 7
30 Church Street, New York, N.Y. 10007

Please send me The Strategic Investor by Douglas H. Bellemore. I enclose herewith remittance of $7.50 with the understanding that if I am not completely satisfied I can return it in ten days for FULL REFUND.

Name_____

Address_____

City_____ Zip Code_____ State_____

Rails score in rate freedom case

The railroads have won the first round in their court fight to upset the ICC's anti-rate-freedom decision in the Ingot Molds case. The Commission's decision has been set aside by a three-judge court functioning in the U.S. District Court at Louisville, Ky.

The case involves the appeal of the Louisville & Nashville and Pennsylvania from the Commission's 1965 decision in I.&S. No. 8038. That condemns reduced railroad rates published to bid for shipments of ingot molds moving over truck-water routes from Pittsburgh, Pa., to Steelton, Ky. The condemnation relies on a finding that the truck-water service is the low-cost mode on the fully-distributed-cost basis. That basis is used generally by the Commission, but it is assailed by the railroads as not in accord with the 1958 Transportation Act's rate-freedom provision, which is now Section 15a (3) of the Interstate Commerce Act.

• **Good case for rail appeal.** The Commission is expected to appeal to the United States Supreme Court, but it must do so without the support of the Department of Justice. Justice filed with the Louisville court a forceful and well-documented presentation endorsing the railroad position, and it was treated there as an additional plaintiff (RA, Oct. 10, 1966, p. 30).

The railroad position is that fully-distributed costs should have no role in competitive-rate cases, the only proper test being whether proposed rates exceed out-of-pocket costs and are compensatory in the sense that they improve net earnings. They consider Ingot Molds a case they can win in court because the Commission there undertook to protect the truck-water service, even though the water carriers are voluntarily maintaining their proportion of the truck-water rates below their own fully-distributed costs.

As the court read the rate freedom provision, it reflects Congress' "clear intent that reduced compensatory rates should normally be allowed." And the evidence before the Commission supplied "no basis for disregarding that intent." The court also said the Commission failed to state a rational basis to support its conclusion that fully-distributed cost is the proper identifier of the low-cost mode. ■

WATCHING **WASHINGTON** WITH WALTER TAFT

TAFT

SHIPPERS SUPPORT ROUTES BILL—Quite naturally, the ICC's current drive for additional power to prescribe through routes and joint rates has won much shipper support. That support includes the backing of the National Industrial Traffic League, which is urging Congressional committees to clear the proposal for action by Congress. The League took that position at recent hearings before the Senate Commerce Committee's Surface Transportation Subcommittee which is headed by Senator Frank J. Lausche (D.-Ohio).

At the same sessions, the Commission's presentation was made by Chairman William H. Tucker and Commissioner Rupert L. Murphy. Murphy heads an ad hoc committee established by the Commission to study the small-shipments problem. The through-routes proposal has been advanced as one approach to solution of that problem. It would give the Commission muscle for its undertaking to provide shippers with more and better service for small shipments.

RAILROAD OPPOSITION—While the principal objective is thus power to require motor carriers to enter through-route arrangements, the Commissioner's recommendation to Congress is broader than that. It calls also for power to prescribe intermodal through routes between truckers, on the one hand, and railroads, express companies and water carriers, on the other. The railroads will oppose these intermodal provisions, but will take no position on the Commission's call for power as to joint truck routes. The Commission already has power to require railroads, express companies and water carriers to establish joint routes—both intramodal and intermodal.

The Commission recommendations would be implemented by enactment of Senate Bill 751. It was introduced by the chairman of the Commerce Committee, Senator Warren G. Magnuson (D.-Wash.) for himself and Senator Lausche. At the request of American Trucking Associations, which opposes the Commission bill, Senator Lausche subsequently introduced S-1768. That embodies safeguards hoped for by the trucking industry if through-route legislation is to be passed.

TO PROMOTE COORDINATION—Discussing the intermodal phase of the Commission's proposal, Chairman Tucker said that present voluntary arrangements are not conducive to the maintenance and expansion of dependable coordinated joint-line service. The principal impact of the intermodal proposal would be in the area of piggyback service, Tucker explained. The Commission has in mind the further development of Plan V which is door-to-door, truck-rail service under joint route and rate arrangements. The Tucker presentation conceded that Plan V operations have been growing, but it pointed out that they remain relatively small. They accounted for only about 4% of the total terminations in 1965, the latest year for which complete figures are available.

NIT LEAGUE POSITION—The NIT League presentation was made by its general counsel, John F. Donelan. He stressed the complexity and confusion now confronting shippers because truckers often flag out of through routes or impose limitations as to types of traffic, weight of shipments and connecting carriers. Without modifying the League's basic position in support of the whole Commission proposal, Donelan did suggest that priority for the intramodal phase might be a good idea.

"If we were to talk in terms of immediate and long-run objectives, our support is directed primarily to the grant of power to the Commission with respect to establishing joint rates and through routes among carriers by truck," he said. He then hastened to add that this should not be interpreted as a statement in derogation of the League's "long-term objective" embracing intermodal routes, too.

LETTERS FROM READERS

When to advertise

Toronto, Ont.

To the Editor:

I was especially interested in your thoughts in "When Does It Pay to Advertise" (RA, April 17, p. 31). For better or worse, advertising has become such a part of North American motivation that merely having an excellent product to sell does not insure its success. This applies in all lines of endeavor whether it is merchandising phonograph records or rail passenger service. The railroad's competitors have so blanketed the media that one wonder whether travelling by rail even occurs to a person making a trip? To cite a specific example, quite a few trains still ran into Portland, Me., and Portsmouth, N. H., until recently. The service was fast and reasonable in price, and yet few people in these cities even knew that any passenger service still operated in this area. You could count the passengers on the fingers of one hand.

You mention that the KCS posted an 18% increase in passenger revenue last year. This very admirable outfit places regular passenger advertisements in on-line newspapers and chamber of commerce brochures. A regular series of modest advertisements is to be much preferred to a half page spread three or four times a year.

My own company pursues a similar program. Hardly a day passes that promotional material is not displayed in Toronto newspapers, radio and television broadcasts, street-car and subway "cards." This is likewise true in other cities from coast to coast. It is constant exposure that keeps the general public from forgetting that railroads are still a part of daily life. The people who read advertising in timetables, railroad publications, and in stations, are most often rail users in the first place, although this type of advertising is still valuable. The man in the street who would never ordinarily step into a terminal or read a trade magazine is the one who must be reached if we are to survive.

Carl V. Ehrke
Passenger Sales
Canadian National

Passenger service

Valley City, Ohio

To the Editor:

Viewpoint [RA, April 10, p. 38] suggested ways the Department of Transportation could help the railroad passenger. The article stated that passengers are subjected to the same service as that which is afforded the mails.

Bravo to the Government in its efforts to improve the mail service by seeking out faster modes of service.

Why not call it LOGISTICS, and afford the passengers and the mails freight service on scheduled freight trains?

J. Rea

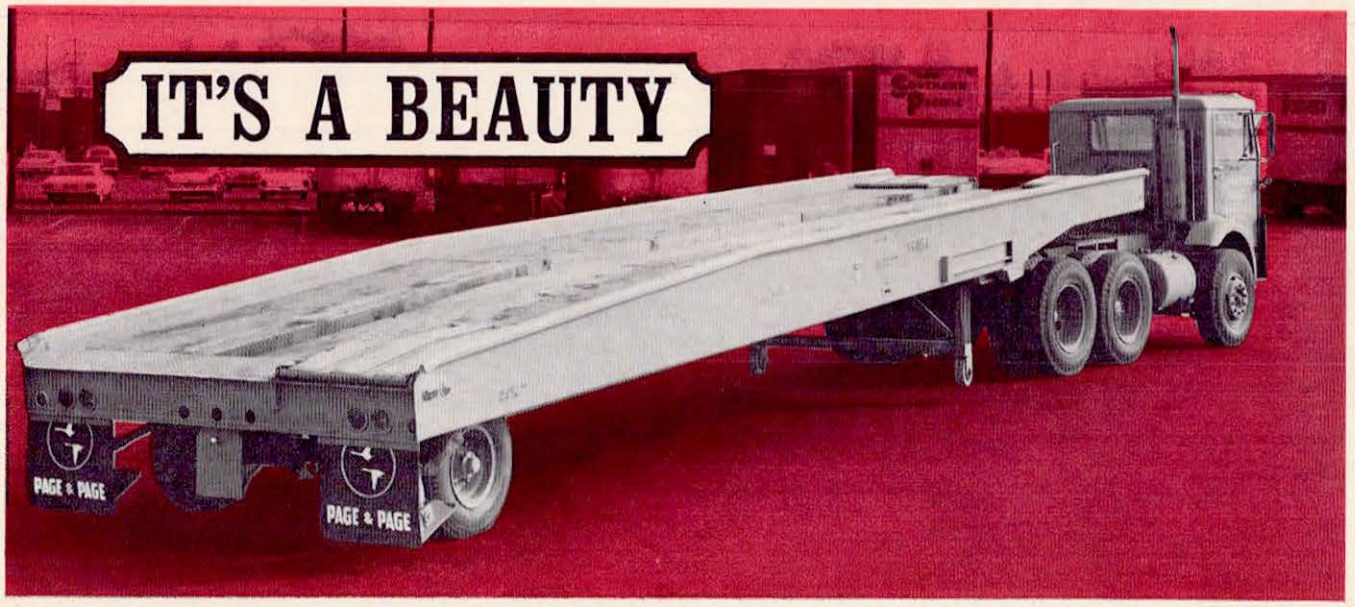
Passenger revenues

Chicago, Illinois

To the Editor:

Referring to your item, "When Does it Pay to Advertise?" in the April 17 issue of Railway Age [p. 34], I wonder if that 18% increase in Kansas City Southern passenger revenues can not largely be attributed to the fact that

(Continued on page 96)



. . . for handling all 100,000 lb. loading situations

And, our PR-100 TOFC Ramp is a beauty when it comes to simplicity of operation, ease of maintenance and versatility in loading positions. Ramp adjusts to any piggyback flat car. Can be used at end-of-track terminals as well as on curved or straight passings. A beauty also for mobility. Towed easily over the road behind any fifth wheel tractor. Write today and ask about the beaut.

Ask, too, about the beautiful job we do on custom engineering and building any kind of rail car modification you need. Repair assignments are also welcome.

PAGE AND PAGE
Division of Dura Corporation

Manufacturers of multi-level and TOFC ramps — total capabilities for all rail loading applications.

1601 N. Columbia Blvd.
Portland, Oregon 97217
(503) 285-0551

Circle 53 on reader service card

MARKET OUTLOOK

Carloadings

Loadings of revenue freight in the week ended May 20 totaled 571,344 cars, the Association of American Railroads announced on May 25. This was a decrease of 4,252 cars, or 0.7%, compared with the previous week; a decrease of 37,981 cars, or 6.2%, compared with the corresponding week last year; and a decrease of 27,334 cars, or 4.6%, compared with the equivalent 1965 week. Ton-miles generated by carloadings in the week ended May 20 are estimated at 14.6 billion, a decrease of 2.9% below the corresponding week of 1966, and 4.2% above the 1965 week.

REVENUE FREIGHT CARLOADINGS
For the week ended Saturday, May 20

District	1967	1966	1965
Eastern, including Allegheny and Pocahontas ..	226,250	247,085	244,308
Southern	116,354	116,006	119,712
Total Eastern and Southern Districts	342,604	363,091	364,020
Northwestern .	79,776	91,365	81,799
Central Western	108,639	115,657	113,535
Southwestern .	40,325	39,212	39,324
Total Western Districts	228,740	246,234	234,658
Total All Roads	571,344	609,325	598,678
Commodities:			
Grain and Grain products	40,719	53,322	44,690
Livestock	1,225	1,727	1,720
Coal	111,420	117,356	113,014
Coke	7,386	8,874	8,514
Forest Products	40,272	40,133	39,502
Ore	49,746	57,781	52,356
Merchandise l.c.l.	4,923	6,078	9,600
Miscellaneous .	315,653	324,054	329,282
May 20	571,344	609,325	598,678
May 13	575,596	611,161	593,858
May 6	561,724	602,244	591,181
April 29	565,846	574,093	592,982
April 22	558,062	543,639	570,489
Cumulative total, 20 weeks ...	10,692,859	11,041,583	10,914,674
Estimated revenue ton-miles (billions) 20 weeks ...	276.2	279.2	258.1

PIGGYBACK CARLOADINGS.—U.S. piggyback loadings for the week ended May 13 totaled 24,579 cars, carrying 41,035 trailers, compared with 22,413 cars, carrying 36,610 trailers, in the corresponding 1966 week. Loadings for 1967 up to May 13 totaled 423,888 cars, carrying 696,532 trailers compared with 403,539 cars, carrying 666,669 trailers, in the corresponding period of 1965.

IN CANADA—Carloadings for the seven-day period ended May 7 totaled 75,365 cars, compared with 77,483 for the previous nine-day period, according to the Dominion Bureau of Statistics.

	Cars Revenue Loaded	Rec'd from Total Cars Connections
Totals for Canada		
May 7, 1967	75,365	25,687
May 7, 1966	86,152	26,712
Cumulative Totals		
May 7, 1967	1,264,193	454,743
May 7, 1966	1,362,677	469,315

FREIGHT TRAIN CARS

► *Car orders decline.*—Orders were placed for 1,728 new freight cars in April, compared with 11,855 in April 1966. Railroads ordered 284 of the new cars; the remaining 1,444 were ordered by private car lines and industry. New freight cars delivered in April totaled 8,311 compared with 9,156 in March, and 7,202 in April 1966. Of the April cars delivered, 6,466 were built by contract carbuilders, and 1,845 in railroad shops. The backlog of new cars on order and undelivered on May 1 was 34,960, compared with 42,010 on April 1, and 59,317 on May 1, 1966. The May 1, 1967 backlog included 26,515 cars to be built by contract carbuilders, and 8,445 to be built in railroad shops. Cars scheduled for rebuilding on May 1 totaled 8,666 compared with 9,417 on April 1, and 9,955 on May 1, 1966. Railroads in April reported no new plans to rebuild freight cars. In April 1966 railroads ordered 750 cars for rebuilding.

NEW FACILITIES

► *Illinois Central.*—Ordered centralized traffic control equipment to control 27 locations on the main line between Rath, Ia., and Lena, Ill., from General Railway Signal Co. A pushbutton control console will be located at Waterloo, Ia.

► *Katy.*—Construction has begun on a 5.8-mile line revision at Rockwall, Tex., made necessary by construction of a dam and reservoir. The new line, costing about $2 million, will be completed in 1968. Work is being done by an outside contractor; costs will be borne by the city of Dallas. Katy is also moving ahead with its 1967 rail-laying program, calling for installation of approximately 16 miles of 115-pound welded rail (replacing 85- and 90-pound rail) and approximately three miles of 112-pound rail (replacing 85-pound rail), at an estimated total cost of $950,000.

► *New York Central.*—Twenty sets of train control equipment, supplied by General Railway Signal Co., will be installed on NYC locomotives by General Electric Co.

► *San Francisco Bay Area Rapid Transit District.*—Awarded an $800,000 contract to Joy Manufacturing Co. for 80 tunnel ventilating and exhaust fans; the contract includes an option to increase the number of fans ordered to 112. Deliveries are due to begin in April 1968 and continue through April 1969.

► *U.S. Department of Housing and Urban Development.*—Awarded a contract worth approximately $250,000 to General Electric for a study of electronic command and control systems for both highway and rail transportation vehicles. The study, which will be completed next year, is one of a series for which HUD awarded contracts valued at $2.5 million with private firms, aimed at improving urban transportation.

FOREIGN

► *Chile.*—Rockwell Standard Corp. (U.S.) will join two Chilean firms in forming a new company, Componentes Automotrices Rockwell-Standard y Cia., Ltda. (CARS), for manufacture in Chile of leaf and coil springs for the railroad and automobile industries.

YOU OUGHT TO KNOW

Tragic accident probed: Investigation was continuing last week into a head-on train collision on the New York Central that took the lives of six crewmen and injured six others. The crash occurred on May 23 on New York City's west side when the two freights were on Track 1, a line normally used by only northbound trains. At the time of the crash a section of southbound track was being repaired and southbound trains were being routed over the northbound section.

N&W plans industrial park: A 400-acre industrial park is being planned by Norfolk & Western on a tract five miles southeast of downtown Columbus, Ohio. The site, to be called "Discovery Park for Industry," will provide lots of five to 100 acres for industrial plants.

Fair return: Does it pay to participate in foreign trade fairs? Thirty-two firms which took part in the U.S. exhibition at the Hanover (West Germany) Trade Fair April 29-May 7 say "yes." They recorded off-the-floor sales of $359,260 of materials handling equipment, and estimate they will book additional orders totaling $8.5 million in the next 12 months.

Hopper car winners: Pullman's Transport Leasing Division is awarding the use of five hopper cars —free of charge for a year—to winners of a membership campaign conducted by the Grain & Feed Dealers National Association. Three 100-ton cars will go to Alvin L. Lovekamp of U&L Grain Co., New Berlin, Ill., and two to K. D. Peterson of Ohio Farm Bureau Co-op Association, Columbus, Ohio. The two men brought in a total of 104 new members to the national grain dealers association.

L&D and plywood: Members of the National Building Material Distributors Association plan to work with the AAR in establishing a program designed to reduce damage to plywood in rail shipments. Information will be collected on the effectiveness of strapping, dunnage bags, preparation of the car and bracing, and other possible causes of damage to shipments.

Menk joins development group: The Committee for Economic Development has elected Northern Pacific President Louis W. Menk a trustee. CED is a private research and development organization of 200 business leaders and educators whose aim is to promote high employment and stable economic growth.

A new unit train movement, believed to be Canada's first regularly scheduled operation of that type, is now shaping up in Ontario. Shipper is Canadian Industries, Ltd.; carrier is Canadian Pacific; commodity is liquid sulphuric acid. Point of origin is Copper Cliff, Ont., where CIL produces about 1,000,000 tons of acid per year from otherwise waste materials from mines of International Nickel Co. Initial destinations are CIL tank storage farms at Cortwright (near Sarnia) and Hamilton, Ont. Up to five other destinations, and perhaps a second train, may be added late this year or next, as storage and unloading facilities become available. Each train will consist of 56 100-ton tank cars taken from CIL's leased fleet. Emphasis will be on fast scheduled overnight service, plus fast loading and unloading through bottom unloading valves specially approved for this operation.

Binding arbitration? Current labor troubles have led the Transportation Association of America to ask Congress to start hearings on legislation that would send unresolved issues to arbitration. "The public is the big loser when any major segment of the transportation industry stops functioning," TAA President Harold F. Hammond told the 10th Southwestern Transportation Round-up at the University of Houston. "Certainly the public interest deserves more consideration in finding ways to avoid such crippling strikes (as last summer's airline stoppage). Too many innocent bystanders are hurt."

Truck tonnage: Intercity truck tonnage in the week ended May 13 was 25.1% above that of the previous week and 3.3% below the volume in the corresponding week of 1966, according to American Trucking Associations.

Current statistics

Net Income	
3 mos., 1967	$120,000,000
3 mos., 1966	172,000,000
Carloadings, revenue freight	
20 wks., 1967	10,692,859
20 wks., 1966	11,041,583
Freight cars on order	
May 1, 1967	34,960
May 1, 1966	59,317
Freight cars delivered	
4 mos., 1967	32,785
4 mos., 1966	29,300
Serviceable cars	
Apr. 1, 1967	1,422,997
Apr. 1, 1966	1,406,470

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Circle 54 on reader service card

(Continued from page 92)

most of the Army personnel destined for duty in Vietnam are channelled through Fort Polk, near Leesville, La., on the KCS, for their final training prior to being sent overseas.

I know my son, Stephen, who is finishing his tour of duty in Vietnam, went to Fort Polk via AT&SF to Kansas City and KCS the remainder of the way. Being a railfan like his father, he enjoyed this rail trip immensely.

I do not begrudge the KCS or any other railroad any additional passenger revenue, but it is regrettable if this has to be accomplished by satisfying the demands imposed upon our society by the current world situation.

Carl J. Bachmann

What's in a name?

Chicago, Illinois

To the Editor:

Please refer to "What's in a Name" in Letters from Readers in the May 15 issue of Railway Age. Mr. Stanley Metalitz is under the impression that the AT&SF doesn't run to places specified in its name. If he would check any timetable he would readily see that the Atchison, Topeka & Santa Fe Railway still runs into all three cities. In fact some of the finest passenger trains in the country are run by the Santa Fe thru Topeka, Kansas.

I might mention that Seaboard Coast Line sounds a lot better than Atlantic Seaboard Line also.

B. L. Bulgrin
Equipment Supervisor, Comm. Dept.
Santa Fe

For the record

New Haven, Conn.

To the Editor:

In the Feb. 6 issue on page 30, in describing a "CV Arrester," the word "clamping" is used twice, as well as the word "clamped," in connection with the attentuation of transient currents. Is this a new term, used by "electronic" engineers, in place of what some of us "old time" electrical engineers called "damping" and "damped"?

I am not critical. I am really just curious. Our language is changing so rapidly nowadays, it is getting increasingly more difficult for some of us "old-timers" to find our way around.

It is, of course very easy for a typesetter to mis-read a written or printed "d" as "cl," but to have it occur four times in an article descriptive of advertised material, and get by your proof readers, arouses my curiosity. Would you be willing to satisfy this?

H. Farnsworth Brown
Consulting Engineer

(Associate signaling & communications editor Elsworth Abbott replies: "A clamping circuit is one where a fixed bias is added to a wave to hold the voltage or current of a feature at a specified level. In other words, either amplitude extreme of a waveform is maintained at a certain potential level. Damping is used when the amplitude of the oscillating quantity decreases with time. A damped wave progressively decreases in amplitude during successive cycles.")

William White

Cleveland, Ohio

To the Editor:

The "Viewpoint" page in the April 17, 1967, issue of Railway Age about William White is an outstanding tribute.

All of us here at Erie Lackawanna who had the privilege of working with him and for him, look on this writing as being particularly accurate in describing him as he was.

We shall miss him greatly.

G. W. Maxwell
President
Erie Lackawanna

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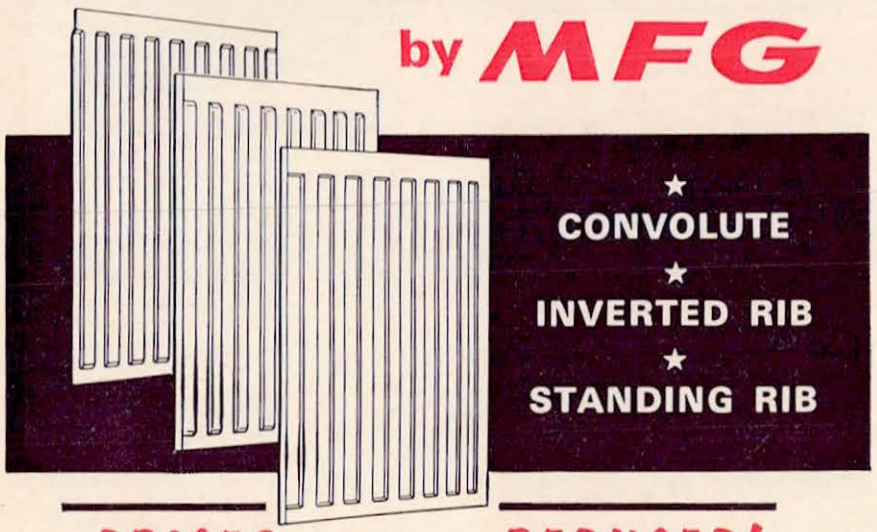

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Advertisers' Index

ACF Industries, Inc., American Car & Foundry Division 64-65
Alger-Sullivan Company 88
American Oil Company 62-63
Association Of American Railroads 24
Atchison, Topeka & Santa Fe Railway System 83
Bartlett Trailer Corp. 77
Bruce Co., Inc., E.L. 25
Buffalo Brake Beam Company ..... BC
Canadian Pacific 84
Cardwell Westinghouse Co. 4
Chicago, Milwaukee, St. Paul & Pacific Railroad Company 16
Collins Radio Company ..... IFC
Dorsey Trailers, Inc. 87
Dow Chemical Co., The Metal Products Department 18
Eberhard Manufacturing Co. ..... IBC
Evans Products Company 54-55
Ex-Cell-O Corp. 15
FreightMaster-Div. of Halliburton Co. 48
Fruehauf Division, Fruehauf Corporation 79
General Railway Signal Co. 9
General Transportation Equipment Company, Inc. 69
German Federal Railroad 69
Great Dane Trailers, Inc. 10
Great Northern Railway Company 73
Greenville Steel Car Co. 80
Humble Oil & Refining Co. 82
Hydra-Cushion, Inc. 38-39
Illinois Central Railroad 22
International Steel Company 71
Kaiser Aluminum & Chemical Corp. 75
Kansas City Southern Lines 3
Kemlite Corporation 76
Keystone Railway Equipment Company 20
Louisville & Nashville Railroad Company 13-14
Lufkin Foundry & Machine Co. 45
MacLean-Fogg Lock Nut Co. 6
Marquardt Corporation, The 46
Miner, Inc., W. H. 28
Missouri Pacific Lines 60
Molded Fiber Glass Body Co. 96
National Castings Division Midland-Ross Corporation 95
New York Central System 86
Nolan Company, The 76
North American Car Corp. 50
Ottawa Steel Products 68
Pacific Coast Engineering Company 23
Page & Page, Inc. 92
Pittsburgh Forgings Company 74
Porter Co., Inc., H. K. 66
Pullman Standard Division Of Pullman, Inc. 26-27
Republic Steel Corp. 61
Reynolds Metals Company 52-53
Rockwell Manufacturing Co., LFM-Atchison Division 89
Seaboard Air Line Railroad 35
Servo Corporation Of America 56-57
Sinclair Refining Co. 21
Standard Car Truck Co. 17
Stromberg-Carlson 78
Stucki Company, A. 70
Thermo King Corporation 85
Timken Roller Bearing Company, The 42-43
Trailer Train Company 19
Transicold Corporation 81
Union Pacific Railroad Company 67
Vapor Corporation 73
Western Railroad Supply Co. 72

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VIEWPOINT

Beware costs—beware complacency

Editors and railroad men have at least a few things in common—one of which is an aversion to, and distrust of, superlatives. To an editor, anything tagged "the greatest" is automatically suspect. To a railroad man, similar cautions are second-nature. It's almost axiomatic that you don't go leaping and bounding into overstatements, particularly when you're trying to forecast the future.

All of this leads into the business of piggyback-predicting—and great things must, indeed, lie ahead. Seldom if ever in any Railway Age piggyback survey have the opinions expressed been (a) so enthusiastic or (b) so unanimous. Traffic and operating officers show a consensus conviction that they have hold of unparalleled opportunity to do an optimum job for all concerned: Providing substantially improved service and at the same time contributing substantially to the improved profitability of the enterprise.

There are, however, a couple of snakes slithering around in this Garden of Eden. One's name is cost. The other is called complacency.

The concern expressed about costs is normal, predictable. TOFC/COFC growth and development have put severe strains on terminal operations. Terminals which were more than adequate a few years ago are risky propositions today. Many roads have had to spend heavily for expanded TOFC/COFC yard layouts and for new and expensive loading/unloading equipment. More of this heavy spending lies ahead, because the alternatives—poor service and spiraling operating costs—can't be tolerated.

The biggest threat of all

So, continuing worries about terminal economics come as no surprise. The real shocker is that other snake, complacency—and the fact that several top men in TOFC/COFC fear it, as the biggest threat of all to their operation's good health.

The question raised in the Railway Age survey was a fairly straightforward one: Do you see any major factor or factors which might tend to limit piggyback growth over the next five years? The replies were equally straightforward: Many TOFC/COFC managers see no such factors at all—but of those who do, the most outspoken are those who fear not for the operation itself but for the attitudes under which it's conducted.

One major road's people cited the "possible failure of the industry to anticipate its needs and provide adequate equipment to serve this growing market." The TOFC traffic manager for another major piggyback operator warned of "complacency—or the failure to recognize the potential of piggyback in the over-all future of the railroads." And the top piggyback traffic man for still a third road boldly penciled-in his terse reply: "Apathy and complacency."

It would seem to be unbelievable—that any profit-maker which (a) looks so good now and (b) offers such hope for the future could be stymied by the inaction or wrong action of its own custodians. But there it is—the warning from some of the men who know piggyback best.

Equipment is no problem

From the hardware standpoint, the fears would seem to be less than justified. Trailer Train, its member railroads and the major equipment manufacturers have kept on top of a fast-changing equipment situation—and there's perhaps no better evidence of that than the current search for the all-purpose trailer/container car. At the same time, railroads, railroad truck lines, leasing companies and a highly-competitive group of suppliers have worked significant improvements in trailer/container design. Only in the terminal-handling area has progress seemed slower—and this may be due largely to the fact that flaws are easy to spot and sometimes hard to fix. But here again, it would be hard to fault the operators: Their actions to improve terminal performance have generally been timely.

The suspicion does exist, though, that piggyback will need a strong boost in the intangibles—sales effort, service improvement, rate refinement, to name a few. TOFC/COFC traffic men are well aware that the days of semi-automatic growth—of grabbing off whole markets in one fell swoop—are going, going, gone. But their enthusiasm for the big job ahead will, hopefully, be TOFC/COFC's big plus—and the main line of defense against complacency.

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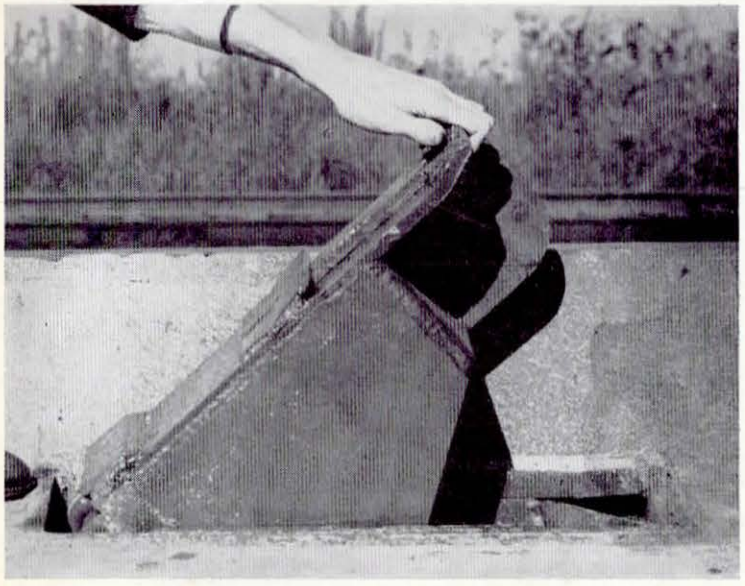

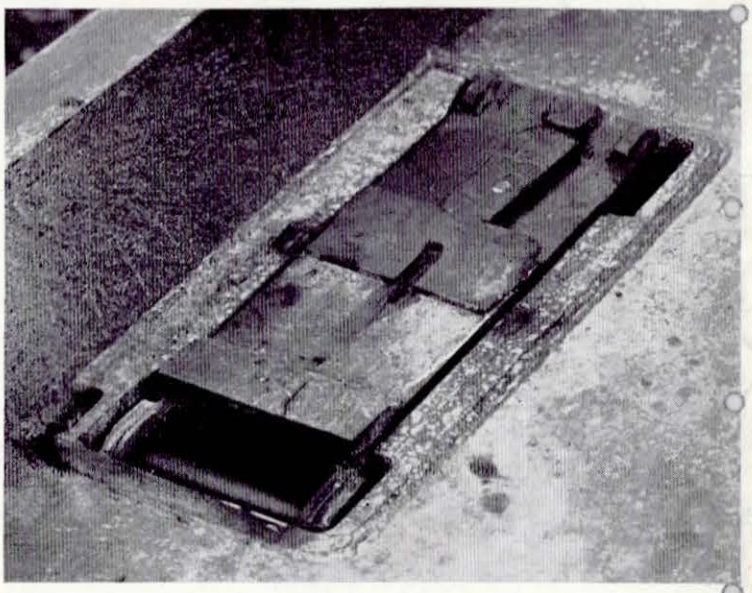

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